I. M. DIAKONOFF

AFRASIAN LANGUAGES

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I. M. DIAKONOFF

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This edition is a revised version of *Semito-Hamitic Languages* published in 1965 both in Russian and in English. The monograph sums up the newer studies by foreign scholars and by this author and his school. The book deals, from the historical and comparative viewpoint, with phonology, morphology and, partially, with the syntax of the major Afrasian languages, and analyses samples of texts. The translation is copyedited by I.M.Diakonoff.

To the memory
of
N.V.Jušmánov and A.P.Riftin

EDITORS' NOTE

The "Languages of Asia and Africa" series was founded in 1959 by the late Prof. G.P.Serdyuchenko, under whose general supervision more than 75 language monographs were published. These publications met with considerable interest among Soviet and foreign readers.

The publication of the series has been continued under the Editorial Board.

The monographs in the series describe either the living languages of African and Asian countries or the languages of the past which played an important historical role in the life and culture of the peoples of the East.

The series is intended for the general linguists and historians—research workers and postgraduate students as well as lecturers and undergraduates of the Oriental philological and historical departments of universities. The monographs may be useful for readers interested in general linguistics or those studying Oriental languages.

Below we give the full list of monographs which have appeared to date in Russian and in English.

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1959

Н.В.Юшманов. Амхарский язык.
(N.V.Jušhmanov. The Amharic Language).

1960

М.С.Андронов. Тамильский язык.
(M.S.Andronov. The Tamil Language).

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(G.A.Zograf. The Languages of India, Pakistan, Ceylon and Nepal).

В.В.Иванов, В.Н.Топоров. Санскрит.
(V.V.Ivanov, V.N.Toporov. Sanskrit).
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(N.I.Tolstaya. The Punjabi Language).
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CONTENTS

INTRODUCTION

0.1. The notion of a distinct linguistic entity desi-
gnated as 'Hamitic', which was thought to include cer-
tain languages of North Africa and to stand in some con-
nection with the Semitic languages, originated probably
with R.Lepsius (1810—1884); this notion became firmly
established after the outstanding investigations of
L.Reinisch (1832—1919) [Reinisch 1909]. The term 'Semi-
to-Hamitic' that has been in use up till a short time
ago, was derived from the Biblical 'Genealogy of Nations'
(Gen. 10), where they all are traced back to the three
sons of Noah — Shem, Ham, and Japheth. Soon the kinship
of Egyptian with the Old Semitic languages became obvious;
this problem was treated in detail by A.Erman (1854—1937).
C.Meinhof (1857—1944) over-extended the notion of 'Hami-
tic languages' subsuming all those African languages
which distinguish gender. Quite a lot of work has been
done later on lexical comparison of the Semitic langua-
ges and/or Egyptian with several African languages. How-
ever, from the point of view of method this research
was rather a failure, since, on the one hand, ancient
languages were being compared directly with individual
living idioms, and, on the other, no attempt was made to
find regular reflexes on the level of proto-languages
(of the different linguistic branches and families). Ne-
vertheless, quite a few reliable correspondences have
been established, especially between Semitic and Egyp-
tian; a somewhat lesser number, between Egyptian and Ber-
ber. One can mention, in this context, the works of A.Em-
ber, R.Calice, E.Zyhlarz, W.Vycichl, W.Leslau. Soon af-
ter World War II M.Cohen (1884—1974) [M.Cohen 1947] pu-
blished the first essay of a comparative vocabulary of
the 'Semito-Hamitic' languages. This work represented a
notable progress in the study of the problem. But it was
justly criticized for lack of precision in using compar-
ative data, as well as for various other shortcomings.
The reviewers (e.g. [Friedrich 1952]) pointed out that
according to the facts represented in Cohen's vocabula-
ry, the 'Hamitic languages' have no separate identity.
As a result, there appeared a school of thought repre-

sented by some Egyptologists and by O.Rössler, a Semitologist, which attempted to separate completely the languages of the 'black' Cushites and Chadians from the Semitic language family to which they also assigned (mistakenly) Egyptian, as well as the Berbero-Libyan languages (O.Rössler).

By the middle of this century it has finally been established that the African members of this linguistic family do not constitute a special 'Hamitic' branch contrasting to the Asian 'Semitic' branch. The former must be classified as a number of independent groups of a single linguistic family (or superfamily) in which each individual African group (branch) is at least equal in taxonomic rank with the Semitic branch[1]. Thus it became impossible to use the old term 'Semito-Hamitic' (or 'Hamito-Semitic') since there was no 'Hamitic' entity contrasted as a whole to 'Semitic', and it never had existed. But, conforming to old habits, this term was still in use in the early 1970s among a section of scholars, although J.Greenberg had already in the 1950s proposed in his classification of African languages [Greenberg 1955], to change it. At present the term can be considered obsolete. Side by side with the modern term 'Afrasian languages' which is now usual in the Soviet Union, they are also called 'Afro-Asiatic languages' (after J.Greenberg, mainly in the USA). In addition, there are some less happy designations, as 'Erythraean' or 'Lisramic' languages.

The first historical and comparative grammar of the Afrasian languages was published in the 1960s [Diakonoff 1965 Russ., 1967 Engl.]. They were still called 'Semito-Hamitic' at that time (cf. also [Diakonoff 1967 Russ.]). Since then historical and comparative studies of the Afrasian languages have steadily gained ground. At the moment work is being done on a *Comparative Historical Vocabulary of Afrasian* [SISAYa 1981; 1982; 1986].

0.2. Afrasian languages are scattered from Central Asia to the Atlantic Ocean (dialects of Arabic), from Tanzania (South Cushitic) to Senegal and Morocco (Berber languages), and from Nigeria (Chadic) to the island of Malta in the Mediterranean (Maltese). According to the most widely accepted modern classification, this linguistic family falls into six branches: 1) Semitic; 2) Berbero-Libyan (or Libyan-Guanche); 3) Cushitic; 4) Omotic; 5) Egyptian (which died out about the 17th c. A.D.); 6) Chadic.

The degree of kinship among the branches, however, is more remote than among the branches of the Indo-European family, e.g. between Indo-Iranian, Slavonic and Germanic. One may, for instance, consider the Chadic branch to be on the level of a family which is subdivided into three branches: Western, Central, and Eastern; these are also distant enough from each other, so they may, perhaps,

themselves rank as 'families', making Chadic a 'superfamily'.

The affiliation of Hausa, as well as of other Chadic languages, with Afrasian was guessed at already in the beginning of this century (C.Meinhof), but it can be considered as a firmly established fact only since the 'fifties: very few scholars still persist in denying this relationship.

A case can be made for considering the Cushitic group as, at least, a family, too, made up of three or four branches: 1) Beḍawye, 2) Eastern and Southern Cushitic, 3) the Agaw languages. But a specially close relationship between Eastern and Southern Cushitic is not self-evident. Southern Cushitic displays some similarities, mostly, with East Cushitic Somali, but these belong mainly to grammatical isoglosses which might represent an areal feature, i.e., their material proximity is disputable. In the lexical sphere its close connection with Eastern Cushitic is not obvious. The group of Sidamo languages (the languages of the Rift Valley) can be related either with the second or with the third branch [Hetzron 1973—74]. The distance between these 'branches' is considerable, so that Cushitic may itself be regarded as a 'superfamily' consisting of three or more linguistic 'families'.

Accordingly, the Afrasian languages may be viewed either as a 'superfamily' or as a 'phylum'. This is due to the much earlier date of the break-up of the Afrasian proto-language, as compared with the Proto-Indo-European, and to differences in the time which has passed since the different individual branches or families, each in their turn, broke away from Proto-Afrasian. But the families constituting the Afrasian 'superfamily', or 'phylum', cannot be studied, from the point of view of comparative linguistics, in isolation from each other. There are Cushitic languages, such as Beḍawye, which show specific similarities to Berber, there are Chadic languages which, possibly, may have connections with Berber, Omotic and Egyptian, etc. Moreover, all the Cushitic languages share a great many common lexical items that result not from genetic kinship but from an extremely long sojourn on contiguous territories.

Comparing individual branches in a family (or individual families in a superfamily, or superfamilies in a phylum) it is possible to determine the relative chronology of the emergence of linguistic phenomena in each or any of these groups by establishing whether such phenomena are characteristic only of a single branch (family), or can be evidenced in several.

Since the taxonomic ranks of the different language groups are still to be established, we shall further regard Afrasian conventionally as a 'family', divided into six 'branches'.

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0.3. To avoid unjustifiable comparisons of data deriving from languages removed in various degrees from the common protolanguage, it is advisable — following the example of Indo-Iranian linguistics — to introduce the notion of Afrasian languages of the Ancient, Middle, and Modern or Late Stages. It is quite obvious that such a subdivision is only a rule-of-thumb approximation. We shall assign to the Ancient Stage those languages which retain obviously archaic phonological and morphological systems, e.g., those of them which are closest in that respect to the languages attested in the oldest written sources and to even earlier structures which can be reconstructed by the comparative method. Languages that possess a phonological system markedly reduced as compared with the oldest attested or reliably reconstructed ones, and which have partially lost their old external inflexion, will be assigned by us to the Middle Stage. At the same time we must keep in mind the fact that external inflexion can appear as a secondary phenomenon, e.g., in the verb it can originate in the morphologization of auxiliary verbs, and in the noun, as a result of postpositions losing their independent status. Finally, those languages which have thoroughly re-structured their phonological and morphological systems, we shall assign to the Late Stage.

0.4. According to our contemporary level of knowledge, we can present a conventional classification of individual branches of the Afrasian family of languages in the following way (marked with spacing are names of those languages which are cited in some detail in the subsequent chapters).

1. The Semitic branch:

(a) Northern-Peripheral (or Eastern, North-Eastern) subbranch: the extinct A k k a d i a n language of the Ancient Stage, with dialects: Babylonian and Assyrian (Late Babylonian belongs to the Middle Stage);

(b) Northern-Central (North-Western) subbranch: Ancient Stage languages—probably, E b l a i t e (the city of Ebla, Northern Syria, 3rd millennium B.C.); undoubtedly, Canaanite, Amorite, U g a r i t i c (2nd millennium B.C.); Middle Stage—H e b r e w, Phoenician-Punic, and some others; a group of A r a m a i c dialects; living languages of the Late Stage: Modern Hebrew, Neo-Aramaic languages (Mandaic, practically extinct except for religious usage, Modern Assyrian, Ṭurōyō, and Maʕlūlā);

(c) Southern-Central (South-Western) subbranch: Old A r a b i c belongs to the Ancient Stage; this includes the language of the Qurʾān and the medieval literature and also, with some reserve, M o d e r n A r a b i c l i t e r a r y l a n g u a g e[2]; the living Arabic dialects from Central Asia to the Sudan and Senegal, as well as Maltese, can be regarded as languages of the Late Stage or as intermediate between the Middle and the Late Stages;

(d) Southern-Peripheral (Southern) subbranch: South Arabian languages of the Ancient Stage—S a b a e a n, M i n a e a n, Q a t a b a n i a n, Ḥaḍramautian (1st millennium B.C.) in Yemen and Ḥaḍramaut, and the living languages of the Late Stage — M a h r ī, Ḥarsūsī, J i b b ā l ī, or Šḫaurī (Šaḫrī), Bathārī and S o q o t r ī (in the People's Democratic Republic of Yemen and on the island of Soqoṭra)[3];

(e) Ethio-Semitic subbranch clearly falls further into:

(e') Northern, with the extinct language of the Middle Stage G ə ' ə z, or Old Ethiopian (it survives in Ethiopia as the language of the church), and the living languages Tigraï (Tigriña) and Tigre (in Eritrea and other northern regions of Ethiopia), and

(e") Southern, in turn subdivided into a 'transversal' group, represented by A m h a r i c, the official language of modern Ethiopia, Argobba, and languages that are conventionally called 'Eastern' Gurage[4], as well as Harārī; and a 'peripheral' group which includes Northern and Western Gurage and the recently extinct Gafat.

Some scholars prefer to combine groups (b), (c), and (d) and call them a 'Western' group, some subsume (c), (d) and (e) as a 'Southern' group, and others even oppose (b), (c), (d) and (e) as a whole, constituting a 'Weststern' group contrasted to the 'Eastern' Akkadian (a). Formerly, we combined together groups (d) and (e) which, as it appears, was a mistake [Diakonoff 1967 Engl.].

2. The Cushitic branch.

All known languages are living ones; they, for the most part, belong to the Late Stage. The composition of the branch is still the object of scholarly discussions.

(a) The Northern-Cushitic subbranch includes the dialects of the B e ḍa w y e (Beja) language. It is spoken by a mostly nomadic population in the east of the Republic of Sudan and the contiguous regions of Egypt and Ethiopia. Lexical isoglosses connecting it with the Eastern Cushitic languages Saho-'Afar, abound (possibly as a result of living for many thousand years in close neighbourhood), but both grammatically and phonologically Eeḍawye stands isolated, resembling rather the Berbero-Libyan languages. Some authors do not consider Bedawye to be a Cushitic language [Hetzron 1980].

(b) Eastern-Cushitic subbranch, which includes the main group of the Cushitic languages, is subdivided into: (1) 'Lowland', or Eastern Cushitic proper: dialects of S a h o in Ethiopia (Eritrea) and the very closely related dialects of the 'A f a r language (Danakil, in Eritrea and Djibouti), the languages Rendille, S o m a l i with its dialects and the related languages of certain small ethnic groups (Ethiopia, Somalia and Kenya); also Bayso, Werize, O r o m o (Galla) with its dialects and related languages of small ethnic groups (Ethiopia, Ke-

nya), (2) 'Southern': Dahalo (Kenya)[4a], I r a q w, A l a-
g w a and the Asa—Ngomvia (or Kwadza) group (in Tanza-
nia), and (3) 'Highland', or 'Rift Valley languages' that
are usually considered together with the languages and
dialects of the Sidamo group[5]: Arbore, Konso—Gidole (?),
G e l e b a, S i d a m o, Burǯi, Hadiya, Kambatta, and
others. Some authors consider either the Southern or the
Highland and Sidamo languages as a separate subgroup dif-
ferent from the Eastern one;

(c) Central, or Agaw subbranch: B i l i n, Khamta, Kha-
mir, Aungi (Awiya), and other languages, scattered in
enclaves throughout Northern and Central Ethiopia. Here
also belongs the now extinct Ḳwara which had been spoken
until recently by an ethnic group of the Judaic persua-
sion — the Falashas. Gǝʕǝz has a number of loanwords
from an older Agaw language (Proto-Agaw?).

3. *The Omotic branch.*

It was originally believed to be a subbranch of Cush-
itic. All the attested languages are living ones and
belong to the Late Stage. Some of them have lost almost
all inflexion worth mentioning and may be considered as
belonging to the analytical type. The Omotic branch in-
cludes O m e t o (with numerous dialects), K a f f a (Ka-
fičo) and Moča, Y ä m m a, Gimirra, Aro, etc. (all in
Western Ethiopia).

4. *The Libyan—Guanche languages.*

These fall into two subbranches: the extinct Guanche
and the Berbero-Libyan, or simply Libyan. Though some
experts are sceptical as to the linguistic affiliation
of the Guanche languages, the latter are obviously very
close to Berbero-Libyan both in grammar and vocabulary,
as far as the scanty surviving European, mostly Spanish
records make it possible for us to judge. But numerous
isoglosses connecting Guanche with Chadic and other
Afrasian languages to the exclusion of Berbero-Libyan,
indicate a divergent development; there are also some
isoglosses with the (4c) group, which may point to an
additional, rather late influx of southern Berbers to
the Canary islands.

(4a) the Guanche subbranch comprised several appre-
ciably differing languages spoken by the aborigines of
the Canary Islands who gradually adopted Spanish between
the 15th and 17th centuries;

(4b) the Berber (Berbero-Libyan, Libyan) languages;
all (except for the extinct ones) are considered by the
French school to be dialects and subdialects of a single
Berber language. But there is enough divergence even in
basic lexical items between individual 'dialects'. There-
fore other scholars are justified in qualifying them as
different languages or dialect clusters of a separate
branch in the Afrasian family. These languages can be
divided into the following groups:

(a) Northern, which can further be subdivided into dialect clusters: (1) Šilh (T a š ə 1 h i t), (2) Tamazight (in Morocco), (3) Zenet (the major dialects being Rif in Morocco, Zouaoua, or K a b y 1 e, Chaouia and others in Algeria, and Šerba in Tunisia);

(b) Eastern (Ghadames, A u ž i 1 a, S i w a h, etc., in Libya and Egypt);

(c) Tuareg (Tamahek and Tamašek) in the Sahara and Sahel (Algeria, Niger, Mali, Burkina Faso): Ahaggar, Taulemmet, Taneslamt, Ghat, etc.: possibly, this group should further be subdivided into two or three subgroups;

(d) the Zenaga group of languages or dialects (in Mauritania and possibly in Senegal).

The Berber languages and dialects listed above belong to the Late Stage in the development of the Afrasian languages.

The O 1 d L i b y a n (or Eastern-Numidian) language of the Middle Stage is attested by inscriptions (since the 2nd century B.C., in Tunisia and Algeria). Another ancient language of the aboriginal population of North Africa, Old Mauritanian, has left some still undeciphered inscriptions; it, too, probably belonged here. Data at hand are insufficient for assigning Old Libyan to a definite (sub)group; one is inclined to include it into group (a).

In terms of grammatical structure the Berber languages are close to Semitic and Beḍawye. At the same time, numerous lexical isoglosses connect them with Chadic and Egyptian.

5. *The Egyptian branch.*

It is represented by only one language: E g y p t i a n at the various stages of its evolution, beginning with Old Egyptian of the 3rd millennium B.C. which apparently belonged to the Ancient Stage. Its latest phase (2nd c. B.C. — 17th c. A.D.) is called Coptic and belongs to the Late Stage. In terms of grammatical structure Egyptian is rather isolated (possibly closer to Chadic), but it shares many morphological and lexical isoglosses with Semitic, Chadic and Berber. The apparent proximity of Old Egyptian to Old Semitic is due to the similarity of their diachronic level.

6. *The Chadic branch.*

It comprises more than 150 living dialects, dialect clusters and languages. At present it is usually divided into three subbranches:

(a) Western Chadic: the H a u s a and Gwandara group: Angas, Sura, etc.; Bolewa, K a r e k a r e, Dera, Tangale, etc.; Southern B a u c h i; Northern B a u c h i; B a d e, N g i z i m, etc.; the R o n group stands apart: Fyer, Bokkos, Ša, etc.;

(b) Central Chadic: Tera, Šara, Hana, Ga'anda, Margi, Bura, etc.; Higi and others; Bata, Gude (Mubi), etc.; Hidkala (Lamang), etc.; Wandala, Glavda, etc.; Sukur,

Daba, Ḥina, Musgoy, Matakam, Mofu, Gisiga; the Kotoko group: Logone, Buduma, Afade, Gulfei, etc.; Musgum; Gider; the Masa group (sometimes described as a separate subbranch);
      (c) Eastern Chadic: Somrai, Tumak, Sokoro, Dangla, Žegu, Žonkor, M u b i, etc.

The Chadic vocabulary has important connections with Egyptian and Berber, its grammar seems closer to Egyptian. A number of Chadic languages are characterized by the retention of various archaisms. All the languages belong to the Late Stage of the Afrasian linguistic evolution; however, Northern and Southern Bauchi, Ngizim and a few other languages have retained a very old phonological system, and some languages, as Mubi, have certain grammatical features of the Middle stage.

Many of the Chadic, Cushitic and Omotic languages are documented very inadequately, some of them have not been described at all, and are known only by their names (sometimes, even their original names, or autonyms, are not attested). As was noted, it is possible that some of the Afrasian languages are still not accounted for. Thus, A.Yu.Militarev, like Ch.Armbruster and others before him, is inclined to think of a 7th, Nubian, branch of the Afrasian languages, relating to it also the extinct Meroïtic language [Militarev 1984 Mer.].

0.5. Both the division of the Afrasian languages into branches and their classification within these branches cannot yet be considered as final. The above mentioned six branches did not break away simultaneously from the initial cluster of very closely related dialects; however, there is ground to believe that all of them originate from it. This cluster we shall conventionally call the Proto-Afrasian language.

The break-up of the Proto-Semitic language took place apparently some four or five thousand years later than the disintegration of Proto-Cushitic occurred.[8] Consequently, the individual groupings inside the Cushitic branch cannot be, as a matter of fact, recognized as being on the same level as the divisions within Semitic. This is precisely the reason why the 'Western Cushitic languages' have now been classified as a separate Omotic branch [Fleming 1969; Bender 1975; see, however, also Zaborski 1980]. There are important arguments for excluding Bedawye from the Cushitic branch, and also, for giving a place apart (within or outside of Cushitic) to the Agaw languages [Hetzron 1980]. As for the Eastern and the Southern Cushitic languages, it still remains uncertain whether they should be placed (within the Cushitic branch) at the same approximate time-depth level as Semitic, or whether they should be treated as a more ancient entity, or regarded as later subbranches comparable with the subbranches of Semitic.

Quite similar is the position of Chadic vis-à-vis the Semitic branch. The three groups comprising this branch seem to have diverged at an early date, being independent units with their own individual prototypes. However, these are likely to have developed out of a common Chadic protolanguage younger than Common Afrasian but much older than Proto-Semitic. In fact, the individual Chadic languages often stand much more apart from each other than the Semitic ones. But we must also take into account, first, the larger purely chronological distance between the disintegration of Proto-Chadic which later developed into separate subbranches, and from that level to present-day dialects. Secondly, we must assess the degree of the local non-Afrasian linguistic influence that acted both as a substratum and an adstratum. The considerable anthropological heterogeneity of the speakers of the various Afrasian languages emphasizes the probability of very substantial linguistic substrata.[7]

The Berbero-Libyan 'languages' (dialect clusters) are roughly as distant from each other as the different subbranches of Semitic; sometimes the divergence is even greater. This fact does not agree with O.Rössler's opinion that they derive from Common Proto-Semitic, although Semitic and Berber are very close to each other in their morphological structure; however, this is not true of the vocabulary. Many Berber phonological and morphological features—to a much lesser degree, lexical ones— are reminiscent of the Northern Cushitic Bedawye.

The lack of contacts between Chadic and other Afrasian branches during thousands of years, with the exception of, probably, Berbero-Libyan, (the impact of Arabic began only in the last centuries of the 1st millennium A.D.), and a powerful substratum and adstratum influence have combined to impart a considerable number of relative divergences in the phonological, morphological and lexical respects to the Chadic branch. Nevertheless, phonetic archaisms have been retained, especially in Western Chadic.

The ancient Egyptian language shares lexical isoglosses with all other Afrasian branches. One may stress the number of lexical isoglosses connecting the Egyptian branch exclusively with Chadic, though the contact between them had been evidently disrupted for a very long time. It is possible that Egyptian and Chadic may constitute a common ECh subfamily[8] that contrasts with another, the SC subfamily, consisting of Semitic and Cushitic.

This may be indicated by the following grammatical isoglosses dated to the Ancient stage: (1) the prefixal type of conjugation of the verbs of action, and the suffixal type of conjugation of the stative verbs in Berbero-Libyan, Semitic and Cushitic[9]; (2) the development of the verbs of action from attributive and prepositional phrases in Egyptian and, most likely, in Chadic (the

conjugation of the stative verbs is identical with that in the first group).[10] The problem of the archaic or innovating character of both isoglosses relating to the inflexion of the predicative word is very complex, and demands taking into account many factors that have not yet been studied.[11]

And thus, though we call the entity uniting all the Afrasian languages, a 'family', and this term is used throughout the book, we certainly do recognize the fact that the relationship of its members is not so close as, for example, the interrelationships in the Indo-European linguistic family.

For reasons of convenience, we subdivide the AA family into two superbranches or subfamilies, SC(B) and ECh(O?) which are further broken down — in a similarly conventional fashion — into the six branches which have been discussed above. It should be borne in mind that some subdivisions of the Cushitic and Chadic branches should rather be treated as independent branches. In this case, what we termed branches will rank as families; superbranches or subfamilies become superfamilies, and the whole Afrasian family will rank as a 'phylum'.

These problems, hopefully, will be solved in the coming ten or twenty years.

0.6. The common ancestor of all the Afrasian languages, Proto-Afrasian, undoubtedly represented a closely related set or cluster of dialects whose distribution was limited both in space and in time. They were so close to one another in phonology, morphology and vocabulary that it is impossible to imagine Proto-Afrasian emerging simultaneously on both shores of the Red Sea ('the Erythraean hypothesis') since that sea must have been a formidable barrier in those ancient times.

We have proposed another hypothesis concerning the origin of Afrasian [Diakonoff 1975], suggesting to place the Proto-Afrasian language in South-Eastern Sahara (say, between Tibesti and Darfur) which was still quite inhabitable in the greater part of its area during the Mesolithic period. If Egyptian and Chadic never really had a developed system of prefixal conjugation, we have to recognize the fact that the speakers of Egyptian were the first to break away from the basic Proto-Afrasian nucleus not later than the 8th millennium B.C. At first they settled in the upper valley of the Great Nile, then they moved down the Nile valley to Egypt. Roughly at the same time — a bit earlier, a bit later — the speakers of Proto-Chadic must have left in the southern direction, and then have merged with the Negroid substratum. Still later the speakers of Omotic moved to the South-East. At the turning point of the Mesolithic and Neolithic periods (not later than the 7th millennium B.C.) the speakers of Proto-Cushitic dialects — or, possibly, Proto-Bedawye, Proto-Agaw and Proto-Cushitic? — also migrated

to the East. By then the characteristic SC(B) verbal
system had fully developed. Speakers of the northernmost
Cushitic dialects (Beḑawye) might still for a long time
have kept up contacts with the Sudano-Saharan nucleus of
the Proto-Afrasian dialects (Semito-Libyan). As the dia-
lectal split of Proto-Semitic, already in Asia, is firmly
dated within the period from the 5th and the middle of
the 4th millennium B.C. [Rabin 1975; Diakonoff 1975, 1981]
it is reasonable to suppose that the speakers of Proto-
Semitic had separated from Proto-Berbero-Libyan some time
during the Neolithicum (6th — 5th millennium B.C.).
This might have been called forth by the end of the Neo-
lithic climatic optimum and the coming of a more arid
age, as well as by the impoverishment of the Saharan
pastures because of overgrazing practiced by the ancient
pastoral tribes. The tribes speaking the Proto-Semitic
language went north-eastward crossing the Nile valley
(still unfit for settlement) [12], and, passing onward over
the Suez isthmus, spread throughout the Middle East. At
the same time, the Libyan-Guanche tribes went in the op-
posite direction up to the Atlantic coast and the Cana-
ries; and possibly, over into the Pyrenaean Peninsula.[13]

The alternative hypothesis advanced by A.Yu.Militarev
suggests that the original locations of the Afrasian lan-
guages were in the Middle East and in the Arabian Penin-
sula.[14] Some Cushitic—South Arabian isoglosses that are
not found in the Ethio-Semitic languages have been addu-
ced by him as a supporting evidence. As indirect indica-
tions to the Middle East as a region of subsequent pro-
tracted development of various Afrasian dialects (not
only Semitic), contact lexical isoglosses are supposed
to exist connecting separate branches of Afrasian, such
as Cushitic, Chadic and Berbero-Libyan, but seemingly
excluding Egyptian, with some non-Afrasian languages of
the same region, viz. North Caucasian (Nakh-Daghestan
and Abkhazo-Adyghian as reconstructed by S.Nikolayev and
S.Starostin) and Sumerian [Militarev-Starostin 1984; Mi-
litarev 1984 Sum.].

The place where part of the speakers of Afrasian cross-
ed over into Africa (in addition to Sinai), is supposed
to be the Bāb al-Mandab Straits. The conditions now pre-
valent there, such as strong unfavourable currents into
the ocean, could hardly have allowed to cross the strait
using the primitive means of transport available to the
Mesolithic and Early Neolithic man. But there is little
doubt that in the earlier ages the strait was conside-
rably more narrow. The cause of the migration is assumed
to be the same as in the first hypothesis, namely, arid-
ization, in this case — of the Arabian Peninsula during
the 6th — 4th millennia B.C. But this hypothesis seems
to require too late a date for the loss of contact be-
tween the individual Afrasian branches; if they had stay-
ed in the same area (Hither Asia and the Arabian penin-

sula) until the 4th millennium, the number of contact isoglosses between them should have been much more considerable than that presented by A.Yu.Militarev. [Militarev 1984 Afras.].

The adherents of the so-called 'Nostratic' or 'Boreal' hypothesis assume a 'Nostratic' linguistic community (which, apparently, must correspond to the language of the Cro-Magnon man of the Upper Palaeolithic epoch). To 'Nostratic' are assigned the languages of the Indo-European, Kartvelian, Dravidian, Uralic, Altaic and Afrasian families [Illic-Svityc 1971]. Naturally, the problem where the early contacts between Afrasian and other 'Nostratic' languages could have taken place must be solved. Some scholars think this happened via the Middle East (which might have been the original home of the Afrasian family) and Asia Minor. Some scholars also believe that Indo-Europeans originate from this region or its neighbourhood [Gamkrelidze—Ivanov 1984].[15] It is also possible that during the Würm glaciation and the consequent considerable fall in the level of the Mediterranean Sea Europe and North Africa could communicate across the Tunisian and, possibly, the Gibraltar straits.[16]

We must stress the fact that lexical study of a proto-language permits us to make inferences about the level of the social development and material culture as well as about the ecology of the habitat of its speakers. Thus, attentive research in the Common Semitic vocabulary makes it clear that the speakers of Proto-Semitic were during the late Neolithicum sheep- and cattle-breeders but not actual nomads [Fronzaroli 1964—1969; 1975]; in absolute dates this corresponds in the Near East to the 6th—5th millennia B.C. Further comparison of Proto-Semitic with the reconstructed Proto-Cushitic language(s) shows that the separation of the Cushitic tribes took place at the level of the Late Mesolithic period (not later than the 8th millennium B.C.). Thus, the Proto-Afrasian language has to be assigned to the Mesolithic period.

During migration from their original homeland the Proto-Afrasian tribes merged and mixed with the local population which quite often was much more numerous. Eventually, tribes of very different racial types began speaking various Afrasian languages. Putting it differently, after a stage of bilingualism the wave of language expansion, as it often happens, went ahead of the original racial groups' movements. Linguistically, the local substrata and adstrata intensified the pace of typological divergence of dialects of the original proto-language, and favoured radical changes in phonology, syntax, vocabulary and, to a lesser degree, in morphology.

0.7. Phonological systems that are closest to that which must be reconstructed for Proto-Afrasian seem to be preserved in Omotic, in some Cushitic languages, and

in several Chadic languages such as Angas, Bauchi and
Ngizim. Undoubtedly, even more archaic was the phonology
of Proto-Semitic; the phonological structure of Old Arab-
ic is still quite archaic. The Egyptian system under-
went a considerable simplification, but it must be stress-
ed that Proto-Semitic, as it is reconstructed, is much
older — perhaps by a thousand years — than even the ear-
liest ancient Egyptian texts. On the other hand, we can-
not reconstruct the Proto-Egyptian language as it exi-
sted at the age level of Proto-Semitic, since the Egyp-
tian branch consists of one single language, and compa-
rativist methods are not applicable.

The phonology of Common Berbero-Libyan can only be
reconstructed at a comparatively late diachronic level,
and presents a picture of overall simplification, yet
it does confirm the validity of the Proto-Afrasian re-
constructions that are given below.

Rather peculiar is the situation in Chadic — with the
exception of a few very archaic languages. The majority
preserve some features of the old phonological system:
the consonantal triads, consisting of the voiceless, the
voiced and the emphatic members; a distinctive role of
the consonants ', u, k, n; the presence of lateral con-
sonants, etc. But any such phoneme does not necessarily
preserve the historical identity of the similarly arti-
culated proto-phoneme. E.g., the Chadic emphatics are
often derived from an Afrasian phonetic cluster, for
instance, a laryngeal + a labial, a dental, or some
other voiced or voiceless stop; at the same time the old
Afrasian emphatics sometimes develop quite differently.

Clear traces of a most archaic morphosyntactical
structure, the ergative, have been preserved in some Cush-
itic languages; there are also some relics in Semitic
(Akkadian). The South-Central Arabic has rather archaic
phonological and morphological systems. Conservative
morphology is characteristic of the extinct North-Peri-
pheral Semitic Old Akkadian (as distinct from Old Baby-
lonian Akkadian, etc.) and the equally extinct Old Egyp-
tian. The same can be said about the ancient South-Peri-
pheral and Ethio-Semitic languages, some of the Berber
languages, and Bedawye. Particular phonological and mor-
phological archaisms are observed in other Cushitic and
in some Chadic languages.

The substratum influence is most noticeable in Chadic,
Omotic, and, perhaps, in Southern Cushitic; among the Se-
mitic languages — in Akkadian of the Ancient stage (Su-
merian substratum). At the Late Stage, such influence is
prominent in Ethio-Semitic (Cushitic, mainly Agaw, sub-
stratum) and in the western Arabic (Maghreb) dialects
(Berber substratum).

Roots common to all the four groups of the Semitic
branch can be counted in hundreds. The total number of
words or roots which can be considered as derived from

Proto-Afrasian is not yet exactly known, but it must be quite considerable.

M.Cohen [Cohen 1947] thought to have identified up to a hundred roots common to three or more branches, and more than 500 that occur in at least two branches of Afrasian. But it must be stressed that Cohen's list contains quite a few irregular and doubtful correspondences, and more sceptically-minded specialists believed that this number must be reduced by three to four times. Cohen's list also has many omissions, since he made no attempt at a sequential, stage-by-stage reconstruction of Proto-Berber, Proto-Cushitic, etc.; he took into account very little of Chadic. Also, quite unjustifiably, he compared Late Stage languages of the African branches directly with the Ancient stage Semitic languages and Egyptian. Moreover, a lot of facts about the modern (especially African) Afrasian languages had not been known and studied by that time. It is evident that a direct comparison of Ancient and Modern Afrasian languages — the latter having, naturally, diverged very substantially from the Common Afrasian prototype — cannot produce convincing results. The historical and genetic relationships of individual members of the family have to be established. In Cohen's days it was not yet possible to reliably define the regularity of all sound correspondences between languages within any one branch of the Afrasian languages, except Semitic. Because of this, it remained impossible to formulate regular correspondences between the branches.

Only recently much work has been and is being done to establish the reflexes both within the Cushitic, Berbero-Libyan and Chadic branches, and encompassing the family as a whole. Provisional counts show that it would be possible to trace perhaps no less than a thousand reliable Afrasian roots common to no less than two, usually three or more branches.

Today, the most urgent task of Afrasian linguistics is to establish regular correspondences. The natural way would be to establish them, first, between languages of various obviously closely related groups, and then, between the reconstructed proto-languages of such groups. The latter could be assigned to an earlier, say, the Middle stage. Next we should reconstruct the individual proto-languages of each group separately, and, finally, the proto-language of the whole family. First attempts in this direction [Diakonoff-Porkhomovsky 1979, SISAYa 1981, 1982, 1986; Hodge 1985] have brought some very encouraging results.

0.8. The above exposition makes it clear that the Afrasian linguistic family includes extinct languages that were part of great civilizations, living languages of great modern nations playing important historical roles, and living languages of ethnic groups with no writ-

ten tradition. Here is not the place to deal with their history, but a short review of their writing systems would be helpful since they have a direct bearing upon the evaluation of problems a linguist has to tackle.

0.9. The earliest Afrasian languages known to us — the Semitic Akkadian and Eblaite, and Egyptian —possessed systems of a mixed logo- and syllabographic type. The basis of such systems was constituted by 'logograms', or ideograms, i.e., pictorial or symbolic mnemonical signs that corresponded to the word reflected by the picture or symbol in question; at the same time, every such sign could represent all other words that were somehow mentally associated with the basic notion. The limit of the range of associated words that could be represented by such a sign was determined by the points of contact with another associative range that was connected with a different sign. Those associations could be functional, by contiguity, by similarity, and phonetical, i.e., homonymous words could be, in principle, represented by the same sign. In real life this could happen only when homonymous words, because of their abstract character, or for other reasons, could not be represented pictorially and, consequently, could not have a sign of their own.

The possibility of associations by homonymity made it also possible to use signs for rebus-like writing, particularly, to represent morphemes, syntactic words, foreign proper names, etc. Because of this every 'word'-sign ('logogram', or ideogram) could acquire additional, phonetic values. Such signs are called syllabic although this is not entirely correct, since they may denote a single vowel, half a syllable, or two syllables. At the same time, because one logographic sign could represent several words, the same sign used syllabically could also become 'polyphonic', i.e., it could denote several entirely different sound-sequences, originally corresponding to different words connected by mental association. Doubtful cases could be clarified by the use of determinatives: the Egyptian writing system uses them with (almost) every written word, and this circumstance often permits the Egyptologists to obtain a more precise meaning of the word. E.g., if it can be inferred from the context that a given word denotes 'a vessel', the pictorial determinative sketches the actual form of the vessel, which, in turn, would make clear the function of the vessel, and so forth. In the Sumero-Akkadian writing system the determinatives are used optionally and point to the general category to which a given notion belongs: professions, gods, countries, birds, fishes, wooden objects, objects made of metal, leather, stone, etc.

In Mesopotamia the pictorial writing was replaced by cursive already by the middle of the 3rd millennium B.C. Writing consisted of drawing lines on a clay tablet with

the edge of the cut-off end of a reed-stick; therefore, in time cursive signs assumed a wedge-like (cuneiform) character. In Egypt pictorial writing, or hieroglyphics, remained in use for monumental and display inscriptions until the end of the ancient Egyptian civilization. Simultaneously with it there was in use a cursive (hieratic) and later, an even more abbreviated and ligatured demotic writing.

The logo-syllabographic writing systems had never made any attempt at an adequate representation of the phonological aspects of speech. For instance, in the Akkadian cuneiform script voicelessness, voicedness or the emphatic character of a consonant were never distinguished either in the inlaut or the auslaut. And in other cases syllabic signs did not always make it possible to distinguish different phonemes with the same locus of articulation. Thus, in Old Akkadian no distinction at all was made between voiced, voiceless and emphatic sounds; all the affricates were represented by a single series of syllabograms, etc. In time, more accurate methods of representing phonological and phonetical differences were gradually introduced, but the stage of a full and adequate reflection by writing of the entire phonological system was never reached. E.g., there were special signs for ⌊ba⌋ and ⌊pa⌋ but a single sign represented both ⌊bu⌋ and ⌊pu⌋. The pronunciation of Akkadian words is usually established with the help of etymology, i.e. comparing the pronunciation of related words in other Semitic languages, or comparing the use of different signs in the inflexion of the same word. In Egypt, neither the logographic nor the syllabographic signs could distinguish vowels, and in this way the sign *mn* could be read as *man, min, mun, mana, əmna*, and so on.

0.10. About the middle of the 2nd millennium B.C. the Western Semites developed a 'quasi-alphabetic' writing system consisting of 22 to 30 signs where each sign represented a 'consonant + any or zero vowel'. This system much more adequately represented the consonantal phonemes, although in some cases a single sign could be used for two (or more?) acoustically similar phonemes, e.g., *šV* for [šV] and [śV], *ḥV* for [hV] and [ḫV], *'V* for ['V] and [γV] [Steiner-Nims 1984]. Later on this (so called 'Phoenician') quasi-alphabet was modified in such a way that some signs for sonorants became also used for representing homorganic long vowels and diphthongs (these are the so-called *matres lectionis*): *w* for [ū], [ō], *y* for ⌊ī⌋, [ē]; ', *ḥ* (originally only in the auslaut) for [ā].

0.11. All the later writing systems of the Afrasian peoples derive, directly or indirectly, from the West Semitic quasi-alphabet. Below we enumerate Afrasian languages that possess, or had possessed, a system of writing, with their characteristics in brief.

Semitic languages: Akkadian — the Old Akkadian and Classical Akkadian cuneiform script; Eblaite — a modification of the Old Akkadian cuneiform script; Ugaritic — a quasi-alphabet with cuneiform signs that are not derivatives of Akkadian; special signs for ['a], ['i] (and ['∅]), ['u]; Phoenician — a West Semitic quasi-alphabet (in late Punic inscriptions — with the use of the *matres lectionis* system to denote some of the short vowels); Hebrew — the same quasi-alphabet, later the modern Hebrew script, a modification of Old Aramaic (v. infra); since the early Middle Ages supra- and subscript diacritics for vowels (only in the Biblical texts); Old Aramaic — the Phoenician quasi-alphabet with slight cursive modifications; the Syriac and Mandaic dialects developed special cursive varieties: the Syriac with sporadical supra- and subscript diacritics for short vowels, the Mandaic extending the *matres lectionis* system to short vowels; Arabic — a further development of the Aramaic cursive script with the addition of some letters for the phonemes absent in Aramaic; all long vowels obligatorily expressed by *matres lectionis*; for the Qur'ān, school texts and similar there are also supra- and subscript diacritics for short vowels; Maltese — the Roman alphabet; Epigraphic South Arabian — a variety of the West Semitic quasi-alphabet with additional letters; Gǝ'ǝz (Old Ethiopian) — South Arabian script where each sign represents a consonant + short a, but the form of the characters is slightly modified when representing a combination of a consonant (1) with the zero or the neutral vowel, (2) with [i], (3) with [u], and (4) with long [ā]. Tigre, Tigraī and Amharic — the same script with slight variations.

The majority of Cushitic languages are non-literary; some use the Amharic script; Somali, after an experimention period using an alphabet of its own as well as Roman characters, has adopted the Arabic script.

The Berber languages: Old Libyan (Numidian) had a script of its own based on the principles of the Phoenician (or the South Arabian) quasi-alphabet. A derivative of this system, the Tifinagh script, is still used by the Tuaregs of Central Sahara. The speakers of Northern Berber languages sometimes employ a modified Arabic script but much more often they write in Arabic.

The Egyptian language — v. supra. A modified variety of the Egyptian system was used for Meroitic. Coptic (the latest stage of the Egyptian language) adopted the Greek alphabet adding a few signs taken over from the Demotic script; the same applies to Old Nubian.

A single Chadic language possesses a writing system, viz. Hausa: in the 16th—19th centuries A.D. it used a variety of the Arabic script, at present it employs Roman characters.

REFERENCES

[1] It seems that of all other noted specialists in the field only W.Vycichl continued, in the 1970s, to set off the Semitic languages against all the other Afrasian languages as 'Hamitic', on the basis of a single criterion: the prevalence of triconsonantal roots in Semitic, and of biconsonantal ones in 'Hamitic'. Vycichl does not deny the existence of biconsonantal roots also in Semitic, while there are tri- and even quadruconsonantal roots in 'Hamitic' but, however, he tries to downgrade the role of the triconsonantals in the latter.

[2] The Modern Arabic literary language is wholly based on the Old Arabic of the Ancient stage, but the external inflexion is reduced.

[3] According to Militarev [Militarev 1984 Afras.], the South Arabian languages of the Late stage and the South Arabian languages of the Ancient stage belong to different branches.

[4] Gurage, or *qəsṭāna* ('Christians') is a common denomination of those ethnic groups that speak non-Amharic Semitic languages, mainly south of the Amharic-Argobba area, and who are Christians. Closely related are the languages of Gafat and of the Moslem Harārī.

[4α] Some authors believe that Dahalo belongs to 'Lowland' Cushitic.

[5] All the languages of subgroup (b [3]) are sometimes called 'Sidama'. This designation is not very happy since earlier it was applied to still other dialects.

[6] If the latter linguistic entity ever existed at all. It is possible that Proto-Agaw, Proto-Eastern-Cushitic, Proto-Bedawye, etc., derive directly from Proto-Afrasian. This problem has not been sufficiently studied.

[7] Part of the Berbers and (in the past) the Guanche belong(ed) to a special 'sub-race' within the Europeoid greater race which had much in common with some anthropological types of Western Europe; the Guanche have even been compared with the Cro-Magnon man of the Upper Palaeolithicum of Europe. The rest of the speakers of the Berbero-Libyan (and, formerly, of the Egyptian) languages belong mostly to various types of the 'Mediterranean' sub-race of the Europeoid greater race. The speakers of the Semitic languages belong to the 'Mediterranean' and 'Assyroid' (or 'Armenoid') sub-races of the Europeoids. Speakers of Southern Semitic languages belong mostly to the 'Ethiopian' sub-race, which also apparently should be classed as Europeoid, although some scholars prefer to class it as a sub-race of the Negro race. The Cushites belong also to the Ethiopian sub-race, while the rest of Afrasian speaking tribes and nations belong to the 'Negroid' sub-race of the Negro race.

[8] Or a 'superfamily' if one prefers to classify Afrasian as a 'phylum'. Grammatically, Berbero-Libyan languages belong to SC (thus SCB), and Omotic may belong to ECh, but this needs serious checking.

[9] The prefixal conjugation of the verbs of action is retained in all Berber languages, in Akkadian, almost in all other Semitic languages (for the imperfective conjugation), in many verbs of the Northern Cushitic Bedawye, and is vestigially attested in some Eastern and Central Cushitic languages.

[10] The common Afrasian suffixal conjugation of the stative verbs has survived (1) in the Semitic languages, but the original function is attested only in the extinct Akkadian where the stative predicate (a most important detail!) is both structurally and functionally not really a verbal but rather a nominal form, which is an extremely archaic feature. The rest of the Semitic languages use the suffix conjugation only in the "Perfect" of later origin; (2) in the Egyptian language; (3) in Kabyle, Auǯila and some others of the Berber branch; (4) In Cushitic the typical finite verbal form is a compound between a verbal noun and a suffixed auxiliary verb with prefixal inflexion, transformed into a suffix no longer felt as a separate lexeme; but in Sidamo etc. there exists a so-called 'relative conjugation' which is formed from a verbal noun plus an auxiliary verb in the s u f f i x a l 'stative' conjugation; (5) in the Chadic branch the suffixal conjugation of the original stative has apparently survived in Mubi. The place of Omotic in this classification is not clear since it has lost almost all external inflexions. It is not improbable, however, that Omotic has retained relics of a suffixal conjugation, and could belong to the ECh subfamily (thus EChO?).

[11] The problems of grouping and ordering the branches of Afrasian are still far from being clear. In particular, this concerns the history of their verbal systems. The matter is made even more complex by the fact that in Chadic only the construction 'attribute—determinatum' is attested, while in both Egyptian and Semitic the usual order is 'determinatum—attribute'. Both constructions are present in Berbero-Libyan. As a consequence, both consistuent parts of the verb that has its origin in an attributive or prepositional construction are fixed in Chadic in an inverted order, as compared with Egyptian. It seems likely that we have to accept the Chadic variant as the typologically more ancient, because the formation of the prefixal conjugation justifies the supposition that the dominant order was still that of attribute—determinatum at the time of appearance of this type of conjugation in the other groups of the Afrasian languages, Semitic included. It is, of course, always possible that in Chadic we deal with a secondary appearance of a typologically old construction.

[12] The Nile valley was partly a sea gulf, partly swamped up to a point which now lies rather far up the valley. The more probable route would be via the Wadī Ḥammāmat and what now is called the Eastern desert to Suez and further to the North-East.

[13] The Iberians, the ancient population of the Pyrenaean Peninsula (not to be confused with the Iberians who lived in Iberia or Iveria, a part of ancient Georgia in Transcaucasia) are sometimes believed to be linguistically related to the Berbero-Libyans, but the surviving Iberian texts make this hypothesis very plausible.

[14] A more precise identification was proposed by Militarev and sustained from the archaeological and historical side by V.Shnirelman. In their opinion, the Proto-Afrasian speakers were the Natufians of the well-known early Neolithic culture of the Palestine-Syrian area [Militarev-Shnirelman 1984].

*   *   *

PHONOLOGY

1.1. The phonological system of Common Afrasian can be recon-
structed as follows:

	Consonants				Sonants
Labial plosives		p	$\dot{p}$	b	$\overset{\eta}{o}$
Labial fricatives	f	—	—	—	
Dental plosives		t	$\underset{\bullet}{t}$	d	$\overset{n}{o}$
Dental fricatives and affricates	s	$c(t{+}s)$	$\underset{\bullet}{c}(\underset{\bullet}{t}{+}s)$	$\mathfrak{z}(d{+}z)$	—
Palatalized (or bifo- cal) dental frica- tives and affrica- tes	$\check{s}$	$\check{c}(t{+}\check{s})$	$\underset{\bullet}{\check{c}}(\underset{\bullet}{t}{+}s)$	$\check{\mathfrak{z}}(d{+}\check{s}/\check{z})$	$\overset{r}{o}$
Lateral fricatives and affricates	$\hat{s}$	$\hat{c}(t{+}\hat{s})$	$\underset{\bullet}{\hat{c}}(\underset{\bullet}{t}{+}\hat{s})$	—	$\overset{l}{o}$
Velar plosives		k	$\underset{\bullet}{k}$	g	—
Labialized velar plo- sives		k^w	$\underset{\bullet}{k}^w$	g^w	—
(Post)velar fricati- ves and affricates	$\underset{\bullet}{h}$	$x(k{+}h)$	$\underset{\bullet}{x}(\underset{\bullet}{k}{+}h)$	$\mathfrak{g}(g{+}h/\gamma)$	$\overset{i/u}{o}$
Labialized (post)ve- lar fricatives and affricates	h^w	x^w	$\underset{\bullet}{x}^w$	g^w	$\overset{H}{o}{}^{w}$
Pharyngeals	$\underset{\bullet}{h}$	—	—	—	$'$
Laryngeals	—	—	—	$'$	$\overset{H}{o}$ (< *$\grave{a}$ with falling tone)
Aspiration	h	—	—	—	—
Labialized aspiration	h^w	—	—	—	—

1.2. The above composition of the common Afrasian phonological
system is established as a result of a reconstruction based on the
reflexes in the living languages and, in certain cases, on the fo-
reign transcriptions of the words of the extinct languages.

It should be pointed out that the real phonetics of the Ancient
Stage languages, i.e. Akkadian, Eblaite, Ugaritic, Epigraphic South
Arabian, Old Egyptian, cannot be deduced directly from the old

inscriptions. The transcription adopted by scholars is conventional. It is based not on the oppositions of the semantically minimal phonological pairs in the language, but on the oppositions of the semantically minimal pairs in the writing. The phonetic value of these "graphophonemes" is established by way of identification with known phonetic reflexes in other closely related languages (in particular, in Arabic and Hebrew for Akkadian, in Coptic for Old Egyptian, etc.). Further information can be elicited from the analysis of the alternations of these "graphophonemes" in specific phonotactic (positional) situations. The reconstruction of the Common Afrasian archetypes makes it possible to extend the volume of data for the phonemic reconstruction of the ancient languages. It also opens the way for a wider and more exact use of the reflexes of the "graphophonemes" of the ancient languages in the words borrowed by other languages.

1.2.1. In the labial series the reconstruction of Common Afrasian *f and *p as phonemes in their own right is based on coordinated reflexes of Common Chadic and Egyptian: Ch *$f.$ ~ Eg f; Ch *p ~ Eg p (as a rule, in other branches of Afrasian this distinction ($f \neq p$) is lost). The reconstruction of the Afrasian opposition *p: *$\dot{p}$ is based on the analogous corresponding reconstructions in Chadic and Omotic; also AA *$\dot{p}$ > p in Northern Semitic but > *b in Southern Semitic; analogous development *$\dot{p}$ > b is also attested in Berber. Thus, the common Afrasian subsystem of labials is attested in its fullest in Chadic languages. They also possess an implosive $\dot{b}$ of secondary origin (as a result of contact with now lost laryngeal/pharyngeal or velar affricate), and specific series of correspondences for combinations like *mb, *$b\mu$, etc. In Berber the situation with the reflexes of Common Afrasian labials is not quite clear because of complex combinatorial alternations under the influence of *μ as well as of such other original second and even third root consonants that were lost later.

1.2.2. The dental plosives are well preserved in all Afrasian languages. Thus, the living Semitic languages as well as the Cushitic languages Sidamo, Old Agaw (judging by ancient borrowings in Gə'əz), Oromo, etc. preserve t, $\underset{.}{t}$, d; in Berber the reflexes are t, d (but when geminated tt), d. In Egyptian, Afrasian *$\underset{.}{t}$ > d. Analogous development is attested in some Cushitic languages (as well as cases of change t > d, d > r and the like). Hence Akkadian, Ugaritic and South Arabian Epigraphic "graphophonemes" *t, *$\underset{.}{t}$, *d can be safely considered as $[t, t, d]$.

1.2.3. The so-called emphatic phonemes (which are transcribed by a dotted letter) are phonetically realised in different Afrasian languages as velarized or uvularized (e.g. in Arabic), glottalized, i.e. followed by a glottal stop (in some Ethio-Semitic and modern South Arabian), implosive (often in Chadic) and so on. Their original articulation was in all probability glottalized. The emphatic consonants did not enter in an opposition of voiced vs. unvoiced, but rather formed another opposition: non-emphatic (voiced or unvoiced) vs. emphatic. Thus the opposition voiced : unvoiced was irrelevant for emphatic consonants, and the Afrasian protophoneme *$\underset{.}{t}$ (or rather *T) could be realised either as $[\underset{.}{t}]$ or as $[\underset{.}{d}]$. Hence it is reflected as d (in Egyptian, modern Agaw and some other Cushitic)

or t (in many Chadic languages) when its emphatic character (glottalization, velarization) is lost.

1.3. The reconstruction of the three series of Afrasian sibilants is a most difficult problem. Formerly, affricates were not reconstructed for Proto-Semitic and Proto-Afrasian. But the necessity of reconstructing affricates is proved by the following:

(a) the Arabic emphatic phonemes $ṣ$, $ẓ(ṭ)$, $ḍ(ẓ̂)$ and in several cases also Arabic s have in some Cushitic languages dual reflexes of the type s-/-d- or d-/-s- which is indicative of an affricate in the prototype;

(b) the Egyptian affricate $ǯ$ ($ḏ$ in the conventional Egyptological transcription) corresponds to all Arabic emphatic sibilants; its pronunciation is established by comparison with Coptic where $ǯ$ is in some cases preserved, while in some other cases $> d > t$;

(c) in some Chadic languages affricates correspond to Arabic emphatic $ṣ$, $ẓ(ṭ)$, $ḍ(ẓ̂)$ and also to s;

(d) it is only on the later stages that Akkadian develops graphic means for independent expression of the phonemes $š$, s, $ṣ$, z (or, more exactly, of the graphic reflexes of Ancient Hebrew $š$, s, $ṣ$, z, the Akkadian pronunciation being hypothetical). In Old Akkadian spellings only three series of syllable signs are used to express all the sibilant phonemes; we shall conventionally mark them as $ŠV$-, $ŚV$- and ZV- (sometimes there is also a group of signs $ṢV$-). It is known that the ZV-signs were borrowed by other languages which used the Akkadian cuneiform writing system, i.e. Elamite, Hittite, Hurrian, and Urartian, for the designation of their affricates;

(e) in Egyptian transcriptions of Semitic personal and place names Egyptian $ǯ$ and $č$ ($ṯ$ in the conventional Egyptological transcription) are used everywhere for the Old Akkadian ZV-signs, and Egyptian s for the Old Akkadian $ŠV$-, $ŚV$- or $ṢV$-signs.

The correspondences of the Old Akkadian graphophonemes with Arabic phonemes are given below:

	Old Akkadian				Arabic			
$ś$	z	z	z		s_1		s_2	$ṣ$	z
$ś/s$	$ś$	z	z	$ʼ$-,	$-h$-,	$-s\#$	$ṭ$	$ẓ(ṭ)$	$ḏ$
$ś$	$ś$	z			$š_1$		$š_2$	$ḍ(ẓ̂)$	

Note: Arab. s_1 ~ Hebrew $š$; Arab. s_2 ~ Hebrew s; Arab. $š_1$ ~ Ǯibbāli, Mahrī, Soqotrī $š$; Hebrew $š$-, $-s$- (?); Arab. $š_2$ ~ Ǯibbāli, Mahrī, Soqotrī $š$; Hebrew $ś$.

Thus, the Old Akkadian graphophoneme z corresponds to Arabic s_2, $ṣ$, z, $ẓ$, $ḏ$ and $ḍ$. This graphophoneme is transcribed by Egyptian $ǯ$ (except in the case of Arabic s_2 and sometimes $ṣ$ which are transcribed as $č$), and the ZV-signs were used by neighbouring peoples for their affricates.

All this permits us to infer, that, first, Arabic s_2, $ṣ$, z, $ẓ(ṭ)$, $ḏ$ and $ḍ(ẓ̂)$ are reflexes of Common Afrasian affricates and, second, that their phonetic reflexes (not graphophonemes) still were affricates in the Old Akkadian period and preserved their affricate status until the 2nd millennium B.C. (because the major part of our comparative non-Semitic data belongs to that time).

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The situation with Akkadian graphophonemes of the later period is given below:

Akkadian					Arabic				
$š̌$	s	$ṣ$	z		s_1		s_2	$ṣ$	z
$š̌$	$š̌$	$ṣ̌$	z	$'-, -h-,$	$-s\#$	$ṯ$	$ẓ(ṯ̣)$		$ḏ$
$š̌$	$š$	$ṣ̌$			$š̌_1$		$š̌_2$	$ḍ(ṣ̌)$	

Thus, we see that the signs of the $ŠV$ and $ŚV$ series changed their value: in Old Akkadian, $ŠV$ ~ Arab. $ṯ$, $ŚV$ ~ Arab. s_1, $'-$, $-h-$, $-s\#$, $š̌_1$ and $š̌_2$, i.e. it corresponds to the whole group of phonemes which are not rendered by affricates in Egyptian (in genetically related words as well as in transcriptions), in Cushitic and in Chadic; ZV ~ Arab. s_2, $ṣ$, z, $ẓ(ṯ̣)$, $ḏ$ and $ḍ(ṣ̌)$, i.e. it corresponds to all phonemes of affricate origin (excluding $ṯ$ which has a special series of syllabic signs, viz. $ŠV$, Old Akkadian S).

In classical Akkadian $ŠV-$ is used for all historically non-affricate phonemes and for the original affricate $č̌$, and the $SV-$, $ṢV-$, $ZV-$ signs are used for phonemes of affricate origin: viz., $SV-$ for the historically voiceless affricate, $ṢV-$ for emphatic and $ZV-$ for voiced ones. The very existence of an opposition between historically affricate versus historically fricative (non-affricate) phonemes leads to the suspicion that even at this period of time (from the beginning of the 2nd to the beginning of the 1st millennium B.C.), affricates were still retained in Akkadian. This hypothesis is confirmed by the correspondence of the $SV-$ series to $č̌$ in Egyptian transcriptions of Semitic personal names, and by the usage of this series for voiceless affricates in Hurrian, Elamite and Urartian.

Comparing our results with the reconstructed system of Proto-Afrasian phonemes (§ 1.1.) we have to establish that the rule 'Old Akkadian $Š$, Akkadian $š̌$ ~ Proto-Afrasian dental fricative sibilant; Old Akkadian Z, Akkadian $ṣ$, z ~ Proto-Afrasian affricate' has its exceptions: thus, Proto-Afrasian $*č̂$, realized as a phoneme different from $*š̂$ in many Afrasian languages, is rendered by $Š/š̌$ which means that it had lost its plosive element in Proto-Akkadian (probably > $š̌$), a phenomenon not unusual also in some other Afrasian languages; and the Proto-Afrasian $*č̌$ is also treated in another way than other affricates, though before the Classical Akkadian period it does not coincide with the fricative sibilants. Therefore the series of bifocal (palatalized) sibilants and sibilant affricates deserves special attention.

$*š̌$ is a rare phoneme, mostly used in the causative marker (Akk. $š̌-$, Hebr. $h-$, Aram. $h-$ > $'-$, Arab. $'-$, $-h-$, $-s\#$, South Arabian $h-//s-$), and in the 3rd person pronoun (Akk. $(-)š̌-$, Hebr., Arab., Aram. $(-)h-$, South Arabian $-h//-s-$). It is quite clear that Afrasian $*š̌$ had a tendency to develop into h in Semitic (a parallel but less consistent development seems also to be attested in Berber).[1] The phonetic change $*š̌ > h$ is underlying the change in Arabic of bifocal sibilant affricates into aspirate dental plosives and still further into interdental fricatives, i.e. $*č̌(t+š̌) > *th > ṯ$, $*č̣̌(ṯ̣+š̌) > *ṯh > ṯ̣$, $*ẓ̌(d+š̌/ẓ̌) > *dh > ḏ$. In Aramaic these aspirate dental plosives have lost aspiration, i.e. $*th > t$, $*ṯh > ṯ$; $*dh > d$.

The situation in Akkadian where the original š did not develop into ḫ is rather more complex. Already in Old Akkadian where the etymological Afrasian *č̌ would be expected to be rendered by the z-series of syllabograms, we find instead, that for this sound the ŠV syllabic series was used. We suppose it was not the sibilant element of the affricate which was lost here, but the plosive one, but at the same time this surviving (secondary) sibilant was phonetically different from the etymological *š (which was marked by the ŠV or SV series). Most probably, this new sibilant was palatalized, i.e. [ᵗč'(t+s')] > [ts'] > s'. The emphatic and voiced affricates of this series lost the plosive element but preserved their status of emphatic and voiced consonants respectively, yielding *ṣ' and *z'. These latter phonemes could be spelled in the same way as c and ʒ, i.e., by the ZV graphic series in Old Akkadian, or the SV and ZV series (possibly they still were phonetically affricates) in later Akkadian spellings. [2]

The development in Eblaite was quite similar, but the ŠV series was here used not only for etymological *č̌ but also for etymological *ᵛ3.

Thus, the Akkadian subsystem of sibilants and affricates can be reconstructed as follows:

Conventional transcription				Reconstructed phonetics			
š̌	s	ṣ	z	s	c	ç	ʒ
(s̲)š̌	š̌	ṣ̌	z	š̌ > s'	š̌ > s'	ṣ̌ > s'	z'
š̌	š̌	ṣ̌		ŝ > s'	ŝ > s'	ŝ > ṣ'	

The rendering of *s, *š and *ŝ by one and the same ŠV (later ŠV) series of syllabic signs probably reflected a real merging of these phonemes in the course of time. It should be noted that in the Babylonian dialect all these phonemes yielded [ŝ] or [s'] (this is reflected by the change of the consonant cluster -ŝt- > -lt- in conventional spelling, i.e. [-ŝt-] > [-lt] phonetically), and only in the Assyrian dialect they merged in [s] (i.e., -ŝt- > -ss- in conventional spellings, that is [-st-] > [tss-] phonetically).

As was noted, Arabic š₁ and š₂ correspond to a single Akkadian sibilant phoneme, which was probably lateral, judging by its correspondences in other Afrasian languages. But the data of modern South Arabian, possibly of Hebrew, and of some other Afrasian languages show that there had existed two different phonemes, namely Arab. s₁ ~ Mahrī, Ǯibbālī, Soqoṭrī š, Hebr. š-, -s- (?); Egyptian š-, -s-; Berber s > š, Cushitic: Bilin s, Iraqw ŝ (lateral), Somali s, Omotic š; Western Chadic *ŝ (Hausa z-, -l-, Zar, Ngizim ẑ-, Ron l, etc.). On the other hand, Arab. š₂ ~ Mahrī, Ǯibbālī, Soqoṭrī ŝ (lateral), Hebr. ś; Egyptian š; Berber *z; Cushitic: Bilin s, Iraqw c (?), Somali d, Omotic š-, -š or c-, -c; Western Chadic *ĉ (Hausa š/s, Zar, Ngizim ŝ-, Ron l-, -s-, etc.) Established for Semitic, Berber and Egyptian by A.Yu.Militarev, for West Chadic by O.V.Stolbova).

From this it can be concluded that the etymological lateral phonemes *ŝ and *ĉ have merged in Old Akkadian (the affricate having lost its plosive element) and thus, both are rendered by the

same $\overset{\prime}{S}V$ (later $\overset{\vee}{S}V$) series of signs, but we have enough reasons for reconstructing two phonemes: $*\overset{\prime}{s}$ and $*\hat{c}$ for Proto-Afrasian.

1.4. The velar plosives are well preserved in most Afrasian languages, but there are some peculiarities of development, e.g. $*k >$ $\overset{\vee}{c}$, $*g > \overset{\vee}{g}$ in Egyptian before i (sometimes also u), $g > \overset{\vee}{g}$ in most Arabic dialects, $k > \overset{\vee}{c}$ in the Iraqī dialect, $*k > \overset{\cdot}{c}$ and $\overset{\cdot}{s}$, $*g > \overset{\cdot}{g}$ in some Berber dialects. The "emphasis" is lost in some Cushitic and Chadic languages; but usally $*k$ yields a postvelar phoneme q. The labialized velar plosives are preserved as separate phonemes in Ethio-Semitic and in some of the Cushitic and Chadic languages; more often they yield non-labialized consonants but with a change of the neighbouring vowel to u.

1.4.1. On the contrary, the velar (or postvelar) fricatives and affricates are not stable: $\underset{\cdot}{h}$ is preserved better than the other phonemes, but nevertheless sometimes develops $> h$. The affricates usually preserve either the plosive, or the fricative element, the latter sometimes developing to ˁ. Often all these phonemes have zero reflexes (thus in all Berber and in some of the Chadic languages; but usually they leave some traces by modifying the **neighbouring** phonemes).

1.4.2. Pharyngeal ˁ (ˁ*ain*) and $\underset{\cdot}{h}$ are, as a rule, rather well preserved. Thus, they are preserved in Semitic even at the Late Stage (except Modern Hebrew, where ˁ is not pronounced, and $h > \underset{\cdot}{h}$, and some of the Neo-Aramaic dialects); in Cushitic they are well preserved in the Southern subbranch, worse in the others, but they are lost completely only rarely, usually yielding ʾ, h, etc.; they still survived in Late Egyptian. They were lost in most of the Berber languages and in the Chadic branch, but often causing modifications of the neighbouring phonemes.

1.4.3. We include the pharyngeal fricative ˁ (ˁ*ain*) with some hesitation in the number of sonants (see below). Genetically, phonetically and functionally it reveals some specific peculiarities (some of them, but not all, are shared by its voiceless counterpart $\underset{\cdot}{h}$). But, in any case, it is not a member of the original system of fricatives (all of them are voiceless) and is not a plosive. It is not impossible that Proto-Afrasian had two ˁ*ain*'s — a plosive $*ʔ$ and a sonant ˁ (similar to Proto-East-Caucasian). Note that Southern Cushitic has a plosive ˁ*ain* [7].

1.5. The sonant is a phoneme which could originally perform a syllabic function (before a consonant), as well as a non-syllabic one (before vowels or after a closed vowel); in morphology and in syllable formation the sonants could respectively perform the functions either of consonants or of vowels. The reconstruction of Afrasian roots [Diakonoff 1970] shows that the following phonemes could function as sonants: $*\underset{\circ}{m}$, $*\underset{\circ}{n}$, $*\underset{\circ}{r}$, $*\underset{\circ}{l}$, $*\underset{\circ}{l̮}$, $*\underset{\circ}{u}$, $*\underset{\circ}{y}$, $*\underset{\circ}{y}{}^{w}$ and, possibly $*ˁ$ (ˁ*ain*). But in historically documented languages (with the exception of some Berber languages where up to now i, u can perform the function of sonants in the classical sense, and some Chadic and Cushitic languages where the same is true in respect of $\underset{\circ}{m}$, $\underset{\circ}{n}$, $\underset{\circ}{y}$) the syllabic allophones and the non-syllabic allophones developed into independent phonemes. The non-syllabic allophones yielded the

following phonemes: m, n, r, l, $\underset{\smile}{i}$, $u_{\circ}$ ', '/$u_{\circ}$, '; the syllabic allophones yielded the sequences: am, an, ar, al, ai, au, a'/au, a' — thus, e.g., in Semitic. As it seems, their development was quite similar in Egyptian, Cushitic and Berber languages (though in some languages a change of the type $-\underset{\circ}{u}- > -\bar{u}-$ was also possible). As to Chadic, at least in some of the languages $\underset{\circ}{m}$ and $\underset{\circ}{n}$ could preserve their dual nature, and $\underset{\circ}{i}/\underset{\circ}{u} > -\underline{i}a-$, $-\underline{u}a-$.

1.5.1. The glottal stop ' *(hamzah, 'ǎlǎph)* performs the function of a non-syllable-forming sonant in in- and auslaut, but phonetically it is a plosive and thus cannot function as a sonant. Quite hypothetically it can be suggested that there were two phonemes transcribed as ' (or that ' is a reflex of two different phonemes): one of these phonemes was a plosive consonant and functioned as such, while the other was equivalent to the Danish *Stǿd* (lit. "jolt"), viz., a compression of the larynx under the influence of a falling tone, and in our case functioning as a sonant (the former phoneme was transcribed above as '$_\bullet$ and the latter as $\underset{\circ}{H}$).

The Afrasian phoneme $\underset{\circ}{H}^{w}$ differs from $\underset{\circ}{H}$ by the additional token of labialization. It yields u and ' in different languages and positions.

1.5.2. The sonants are conventionally subdivided into "strong" (*$\underset{\circ}{m}$, *$\underset{\circ}{n}$, *$\underset{\circ}{l}$, *$\underset{\circ}{r}$, *') and "weak" (*$\underset{\circ}{i}$, *$\underset{\circ}{u}$, *$\underset{\circ}{H}^{w}$, *$\underset{\circ}{H}$). The "weak" sonants (with the exception of *$\underset{\circ}{H}^{w}$) are more or less stable only in initial position. This is connected with the prohibition of vocalic anlaut which existed in all Afrasian languages; in other positions different changes take place.

1.5.3. *m is the most stable of all "strong" sonants; it is widely used in morphology and word formation; a suggested occasional change *$m > b$ is dubious.

In Semitic and Berber languages *n is also more or less stable before a vowel (before a consonant it is mostly assimilated by it; there are also cases of loss of n before a vowel); *l and *r are well preserved in these languages.

In Cushitic languages the reflexes of *n and *l often merge (usually > n), as well as the reflexes of *l and *r, but then the reflexes of the geminated *ll, *rr and non-geminated *l, *r are usually different (ll in the first case, and r in the second).

The situation in Egyptian is complicated: *$r-$ is preserved here at least before a, but *$-r\# >-$;$\#$, *$-rr- > -r-$ (spelling) and *$ri-$ perhaps > $\underline{i}-$; *$la > na$ in initial as well as in other positions in the literary language, but according to the Coptic data, [1] was preserved in some dialects; *$li/u- > \underline{i}-$. There are also cases when Afrasian *l is spelled and/or pronounced r, e.g. r', read $[ri\breve{a}$'$]$ 'sun' ~ Cushitic *lV'; *rw 'lion' was read $[law]$. It is quite probable that the geminated *ll yielded a different reflex from the non-geminated phoneme.

1.6. The majority of Cushitic and all Chadic languages have tones. The present tone systems differ substantially in the various languages and are, in all probability, secondary. But it seems most likely that Proto-Afrasian was itself a tonal language. Traces of tonal oppositions may be sought for in Akkadian and South Arabian Epigraphic.

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REFERENCES

[1] In most other Afrasian languages *š in represented as *s, with some notable exceptions: in Egyptian: 'fty 'each' corresponds to Sem. *'aštī 'one, unique, alone', -f to Sem. *-šuwa 'his' (but -s to Sem. *-šiịa 'her'); in the Dubay cluster of the Sidamo group PAA *s and *š seem to be represented as s and š (or f??).

[2] The same type of 'Akkadizing' pronunciation of the second group of dental affricates seems to have occurred in the early Aramaic dialect of the Khabur valley, since in an 9th c. A.D. inscription from Tell Fekherye the etymological *č is rendered by the grapheme s (perhaps for [ts']?). The usual development in Aramaic was [*t+š] > [*t+h] > [t]. See Ali Abou Assaf, Pierre Bordreuil, Alan R. Millard, La statue de Tell Fekherye et son inscription bilingue assyro-araméenne, Paris 1982.

ROOT AND WORD STRUCTURE

2.1. Our reconstructions are based on the assumption that the root morpheme was a word minus inflexion, the latter being vocalic, consonantal, or zero (e.g. in the absolute case, that is, when it has no syntactic connections, or when it is the predicate, or was originally the subject of a state) [Diakonoff 1965 Russ., 54–57; Diakonoff 1967, 211–215].

It is necessary to take into consideration that the root morpheme can in principle coincide with the word itself, and thus certain rules of word-formation in Common Afrasian (which are still valid in many Afrasian languages) can also be applied to root-formation. The permitted sequences of phonemes should comply with the following rules:

(1) no syllable (including the initial) can begin with a vowel (hence the important part played by the phoneme ', which is the principal substitute of the vocalic initial);

(2) a syllable may not have more than one consonant in in- or auslaut. Hence the root (or stem) morpheme may not end in two consonants (because of the possible zero or consonantal inflexion) or in a vowel (because of the possible vocalic inflexion). The syllable-forming constituent of the root can be represented either by a vowel (a or i/u) or by a sonant; the latter can function as a consonant or as a vowel, depending on its position. This means that a sonant in a word-final (or root-final) position is not forbidden because of its dual phonetic nature [Diakonoff 1970].

2.2. The oldest Common Afrasian roots are the nominal roots; or, more exactly, they belong to the period preceding the formation of verbs in their own right. These roots have a biconsonantal structure (CVC, CSC, CVCS where S is a sonant; the sonant can also occupy the place of any C). If one includes sonants in the number of consonants, the Afrasian root could also have a triconsonantal structure, provided that the second or the third consonant of the root was a sonant (including the "weak" sonants $\frac{i/u}{o}$, $\frac{H}{o}$, $\frac{Hw}{o}$). There also were, in Common Afrasian, roots (possibly quite a few of them) consisting of one consonant and a "weak" sonant — CS. Later a process of root-extension began to operate. There were several different factors which caused this in Afrasian languages. One of them was presumably the loss by the sonants (by all of them or original-

ly by the "strong" sonants only) of their vocalic nature. Another factor seems to have been a prosodic one, viz. a levelling of the root (or stem) morphemes to the pattern of the new triconsonantal roots having a sonant as one of the consonants. The prosodic levelling operated in the following way: the vowels in biconsonantal roots were lengthened, and the long vowels $*\bar{a}$, $*\bar{\imath}$, $*\bar{u}$ appeared. A root with a long root-vowel was then treated as a root with a vowel plus a virtual sonant either in the place of the third or of the second radical consonant. These "supplementary" root-consonants (1) are always "weak" sonants, (2) they are freely interchangeable ($*\underset{\,}{\imath}$, $*\underset{\,}{u}$, $*\,$) and can occupy the place of either the second or the third radical and thus are unpredictable: different patterns may appear in the same language and sometimes even in the same paradigm; (3) they do not, in principle, influence the semantics, although the different variants may, at the later stages, be used for minor semantic differentiations. Still another way of forming triconsonantal roots out of biconsonantal ones is the gemination of the second consonant of the latter. In contradiction to the previous method, gemination is predictable for all biconsonantal roots except the $*CS_O$ pattern, being simply a form of their transformation into a "triconsonantal grammatical word".

The appearance of triconsonantal roots at the later stages of Common Afrasian or in individual branches and groups of Afrasian, allowed the creation of a new pattern of forming triconsonantal roots out of biconsonantal ones, viz. by adding a root-formative morpheme, which, following the usage of Indo-European linguistics, we call a "complement".[1] A complement does change the original semantics of the root, although the original semantics can in most cases still be clearly traced. This means, of course, that the complement morphemes must originally have had certain semantics of their own, but their specific character can be established only when all roots with complements that can be reconstructed for Common Afrasian, are collected and analyzed. Complements may appear, as it seems, only in verbal roots.

In Chadic, Cushitic and Berber the loss of certain postvelar consonants and of "weak" sonants (all of them, as a rule, leaving perceptible traces) led to the formation of secondary biconsonantal roots.[2] A small number of original biconsonantal roots survive in Semitic and Egyptian, but to what degree modern biconsonantal roots in the other branches of Afrasian also represent the survivals of this archaic pattern, is at present very difficult to say. During the latest period the lexicalization of affixes, word-compounds, and loans have led to the appearance in Chadic, and possibly, to a lesser degree, in the Cushitic and Berber languages, of a considerable number of secondary tri- and quadruconsonantal roots (in Chadic almost all of the roots having more than two radicals, belong to this type).

The numerous homonymic biconsonantal roots reconstructed for Common Afrasian seem to suggest the existence of tones in the protolanguage, cf. our hypothesis on the sonantic character of $*\,$.

2.3. As far as the ancient Afrasian system of word-formation is concerned, our data belong almost exclusively to Semitic languages of the Ancient and Middle stages, though we have reasons to suppose

that the situation in the proto-languages of the other branches had been similar. Unfortunately, no archaic language is known in the Chadic and Cushitic branches (with the possible exception of Bed̩awye) which could enable us to make reconstructions of the primitive system of word-formation. One thing, however, is certain, namely that the hypothesis of the predominantly biconsonantal character of roots in these branches is not correct; the situation there was, probably, quite similar to that in Proto-Semitic, though some phonemes which originally formed part of the root structure may have been lost. Apart from the archaic means going back to Proto-Afrasian, the Late Stage languages have everywhere created their own methods of word-formation; they are quite different in the different branches and languages, and it is not possible to give even a summary of them here. We shall therefore discuss primarily the Ancient Semitic word-formation, and the other branches shall be dealt with only briefly.

For the understanding of the history of Afrasian word-formation, the rules of syllable-formation mentioned above are of paramount importance.

2.3.1. One characteristic feature of Semitic languages is usually pointed out in works on Semitic linguistics, viz., that the root in these languages comprises only consonants. In an overwhelming majority of cases the number of consonants is three, seldom two, four or five, the quadru- or quinqueconsonantal roots being of obviously secondary origin. As to the vowels, specific vocalic patterns ('schemes'), sometimes combined with certain consonant affixes, either modify the meaning of the root, or express a grammatical category:

Arabic: *kataba* 'he has written'; *kātaba* 'he corresponded (with)'; *ʾa-ktaba* 'he has made smb. to write'; *i̯a-ktub-u* 'he is writing'; *i̯u-kātib-u* 'he is in correspondence'; *i̯u-ktib-u* 'he is making smb. to write'; *kātib-u-n* 'someone writing, scribe'; *mu-kātib-u-n* 'the corresponding (one)'; *mu-ktib-u-n* 'making (smb.) to write'; *ma-ktūb-u-n* 'written'; *ma-ktab-u-n* 'the place where one writes, office, school, etc.'.

Akkadian: *ʾi-ptur* 'he has released'; *ʾi-pattar* 'he is releasing'; *pātir-u-m* '(the one) releasing'; *pat̩(i)r-u-m* 'released'; *ʾu-ša-ptir* 'he has made (smb.) to release', *mu-ša-ptir-u-m* '(the one) making (smb.) to realease', *na-ptar-u-m* < *ma-ptar-u-m* 'smth. with which one can̥ release, a key', etc.

Hebrew: *kātab* 'he has written'; *i̯i-ktōb* 'he shall be/is writing'; *hi-ktīb* 'he made (smb.) to write'; *kōtēb* '(the one) writing', etc.

2.3.2. The general formula given under 2.3.1. and characterizing the Semitic root is actually completely valid only for Arabic and the Southern Peripheral Semitic languages. It is valid there for all verbal as well as for all nominal roots, i.e.: Arabic: *kalb-u-n* 'a dog', *kulai̯b-u-n* 'a small dog', *kilāb-* 'dogs'; *baḥr-u-n* 'a sea', *biḥār-*, *buḥūr-*, or *ʾa-bḥār-* 'seas'; *bāb-u-n* 'a door, a gate', pl. *ʾa-bu̯āb-*; *bai̯t-u-n* 'a house', *bui̯ūt-* 'houses'; *ʾaḫ-u-n* 'a brother', *ʾiḫu̯-ān-* 'brethren'. Here the different vocalization of the noun is grammatically relevant, and thus represents internal flexion. In Arabic this pattern is still valid even for loanwords.[3]

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In originally denominative nouns (viz. nouns which were formed from nouns) internal flexion may obtain only in the formation of diminutive and collective nouns. The latter served as a base for the formation of the so called 'broken' plural (*pluralis fractus*), on which see below. It seems that the oldest type of collective nouns, used as plurality marker, was $*\check{s}a\text{-}C_1C_2aC_3\text{-} > {}'a\text{-}C_1C_2aC_3\text{-}$. It is this type that is used most often as 'broken plural' in ancient Southern Peripheral Semitic languages. Put as soon as the device of internal flexion was once used for the formation of collective plural, the patterns of nouns capable to function as plurality markers began to multiply. In Northern Semitic languages this phenomenon is attested only *in embryo*.

2.3.3. It is possible to distinguish in Afrasian languages two separate groups of words, according to the devices of their formation. The first group comprises verbs and derivative nouns, which are pervaded by internal flexion to such an extent, that it is entirely impossible to reconstruct any root vowel for these lexemes.[4] The second group comprises nouns which are not connected with verbs; these had a permanent, not semantically determined vocalization in the Ancient Semitic languages, e.g.: Akk. *kalb-u-m* 'dog', pl. *kalb-ū*; *bāb-u-m* 'door', pl. *bāb(-ān)-ū*; *bīt-u-m* 'house', pl. *bīt-āt-u-m* (except some rare cases, i.e. when from the nouns denominative verbs or diminutives were formed). In Hebrew and Old Aramaic the situation is in principle the same. Though the changes of vocalization in cases of inflexion of primary nouns a r e attested here, nevertheless these changes are predictable and of phonetic origin, i.e. Hebrew *kặp̄ặr* 'village', *kəp̄ặr-ô* 'his village' — pl. *kəp̄ặr-îm* (the change in the stem is here due only to dynamic stress). The internal flexion is used here but rarely, and alongside of a main external plural morph, as in Akk. *ṣehr-u-m* 'small' — pl. *ṣehher-ū* (cf. *kalb-ū*, *bāb-ū*); *'alak-t-u-m* 'way, behaviour' — pl. *'alkak-āt-u-m* (cf. *bīt-āt-u-m*); Hebr. *kä̆läb̄* < **kalb-* 'dog' (the change of vocalization is due to phonotactic reasons only — a syllable may not end in two consonants), *kalb-ô* 'his dog', but pl. *kəlặb̄-îm* with a secondary infixed **-a-*.[5] The nouns of the types $C_1aC_2C_3\text{-}$, $C_1iC_2C_3\text{-}$, $C_1uC_2C_3\text{-}$ automatically form in Hebrew plurals in *-îm* from stems patterned as $C_1aC_2aC_3\text{-}$, $C_1iC_2aC_3\text{-}$, $C_1uC_2aC_3\text{-}$, but this pattern w i t h o u t the suffix *-îm* had no specific semantics of its own, including the semantics of plurality. That is why in all these cases we have every reason to consider as roots the forms **kalb-*, **bāb-*, **kapar-*, **ṣahr- (ṣehr-)*, etc., but not **klb*, **bμb*, **kpr*, **ṣhr*. Only *'alaktu* as a verbal noun from **halāk-* 'to walk' has a consonantal root *'lk* < **hlk*.

In Egyptian, too, the formation of primary nouns (designating events and notions characteristic of human existence from the earliest times) was quite analoguous, as it is possible to infer from the absence of positional changes in nominal forms belonging to the same root.

But, on the basis of internal Semitic data, we have been able to establish, that out of the two stem variants of the word 'tongue' in ancient Semitic languages, viz. **lis-ān-* and **las-ān-*, the latter is the original one. This conclusion is corroborated by the Egyptian *ỉb* < **libb-/*lubb-*, but *ns* < **las* 'heart'; *ḳ̣b* 'intestine'

< *karb-, because of the shift -r- > -ʒ- in in- and auslaut positions, cf. Common Semitic *karm- 'hill, vineyard' — Egyptian kꜣm (/ka'm/ < /karm-/); but Common Semitic kir-r- 'lamb, goatling' — Egyptian ṯ; (/či'-/ < *kir-) 'youngling, chick'; Common Afrasian *liu̯'-at-, *li'-t- 'a (wild) cow' — Semitic *li'-t-, *li'-at- (Akk. litt-, Hebr. lēꜣ) — Egyptian iw;-t, etc.

The reconstruction of the Proto-Berber vocalization of primary nouns is obscured, first, because two layers of old definite articles (which have lost their determinative function) are superimposed upon the stem here, and, second, by the shift a, i, u > ə‖ ∅ (as a rule). Under these conditions secondary long vowels sometimes emerged in order to avoid homonyms. But as the place of zero vowel (or ə) in the word is, according to the laws of Berber phonetics, mobile, it is not clear whether we should reconstruct the archetypes of, say, a-rgaz (status liber), u-rgaz (status annexus) 'man' as *hā-rgāz-, *u̯a-rgāz-, or *hā-rugāz-, *u̯a-rugāz-, or, e.g., *hā-ragz-, *u̯a-ragz-. Some primary nouns are extremely shortened, e.g. u 'son', ul-t 'daughter'.

2.4. The number of primary nouns with a vowel as part of the root was, in the Afrasian languages (and in Ancient Semitic languages in particular), considerable. As a matter of fact, all primary nouns belonged here. These roots belong to the type $CVC-$ (and $C\bar{V}C-$), as well as CV_1CV_1C-. The sonant (S) could substitute either C or V but so that the rules of syllable structure could be observed, i.e. $SV-$, $SVC-$, $C\underset{\circ}{S}-$, $C\underset{\circ}{S}C-$, $CVS-$. This was possible, because S could play the part of both a vowel and a consonant. Possibly, there was also a type $CVCS-$. After the sonants have been transformed into the consonants m, n, r, l, i̯, u̯, ', and the syllables am, an, ar, al, ai̯, au̯, primary nouns of the type $CVS-$, $CVC-$, $CaSC-$, $CVCS-$ (the latter type may be realized as $CVCS-V$, $CVCaS-$, $CVCSa+CV$, $CVCaS\#$, depending on the inflexion), and also CV_1CV_1C- emerged. All this means that all the roots of the types $C_1iC_2C_3-$, $CiSC-$[6], CV_1CV_2C- do not belong to the number of primary nouns. Thus, it is but natural to consider them as verbal roots. This is corroborated by the fact that the formation of types of stems other than those enumerated above, can be explained in accordance with the principles of syllable formation under conditions of the Ancient Semitic prefixal verbal conjugation.

In all probability, the most ancient type of the Semitic root was C_1VC_2. The primary character of such roots is a linguistic universal. The secondary origin of the third root consonant (C_3) is often quite clear, in nouns as well as in verbs |SISAYa 1981; 1982; 1986|. We shall suggest a hypothesis on the origin of C_3 below.

2.5. Here it is important to point out that Semitic verbal stems (as well as Berber and Old Cushitic ones similar to them) could be formed according to models of vocalization different from the nominal stems, and this became an important factor for the enlargement of the vocabulary.

Thus, marking the consonant of the prefix as P, we may obtain the patterns $PV-C_1VC_2$, $PV-C_1C_2V(C_3)-$. These patterns have no restrictions as to the quality of their vowels and consonants as far as the Afrasian laws of syllable formation are concerned. Even in the case of $PV-C_1VC_2V$ the suffixation of not only $+C_3V$, but also $+V$ is possible through the creation of a glide, homorganic to the last V of

the stem, for example: *PV-CVCiḭ+V, PV-CVCuu̯+V, PV-CVCa'+V*. The only
prohibited pattern is the type $*PV-C_1VC_2C_3-$, even in case when either
C_2 or C_3 or both are sonants, because the laws of syllable forma-
tion do not allow to add either a suffix $-CV$ or a zero suffix to
the sonant functioning as consonant, nor a vocalic suffix to a son-
ant functioning as consonant, nor a vocalic suffix to a sonant func-
tioning as vowel. But such a stem, when containing a sonant, may
be transformed into the pattern $-CVSaC-$ or $-CVCaS$, etc., as was the
case with nominal stems.

Thus, prefixation of verbal inflexions gives wider possibilities
for the formation of triconsonantal roots, and this also leads to
the enlargement of the set of possible verbal stems, also with the
help of a noun-forming prefix, e.g. $*mV-$, $*tV-$, $*šV-$, etc.

As it was pointed out above, the internal inflexion (the so call-
ed interfix, or broken inflexion) actually pervades the entire
verbal word, so that it is impossible to establish the root vowel.
The Semitic languages (especially Southern Semitic) are characteri-
zed by a great diversity of secondary word patterns derived from
verbal roots. Each of them has special semantics of its own (*nomina
actionis*, names of place of action, names of professions, etc.). A
similar situation may have existed in Ancient Berbero-Libyan,
though it is very difficult to trace a semantically relevant system
of vocalic patterns of deverbal stems at the modern level of these
languages.

2.5.1. Several systems of principles have been proposed for the
vocalization of Old Egyptian. They were based on different assump-
tions concerning the syllable structure and the character of dynamic
stress and their changes up to the Coptic language of the first
centuries A.D., which already did spell vowels. It is necessary to
note here the works by E.Edel, G.Fecht, W.Vycichl, T.M.Thacker,
J.Vergote. All these scholars follow the Semitic models in one way
or another, but their reconstructions are sometimes doubtful. Thus,
we believe that the phoneme signs marked as $\jmath$, $\dot{\imath}$, w, y in modern
transliterations of Old Egyptian hieroglyphics, originally denoted
o n l y consonants, but other scholars are of the opinion that from
the very beginning they could be *matres lectionis*, and expressed long
vowels, too. Egyptologists often regard the pattern of the active
participle $*C_1\bar{a}C_2iC-$ as common for Proto-Semitic and Proto-Egyptian,
but this can hardly be true. First, this would presuppose the exist-
ence of an opposition active vs. passive voices in Afrasian. This,
however, is most dubious, and does not match the semantics suggest-
ed by J.Vergote for a number of vowels supposedly belonging to this
hypothetical pattern: $\underset{.}{h}f\jmath;-w$ 'serpent' < $*/\underset{.}{h}\bar{a}fi'-/$ 'creeping, coil-
ing'; $\dot{\imath}'\underset{.}{h}$ 'month' < $*/\dot{\jmath}\bar{a}'i\underset{.}{h}/$ 'marching'; $h\underset{.}{r}w$ 'day' < $*/h\bar{a}riu-/$
'catching fire, beginning to burn'. It is quite evident that these
lexemes as interpreted by Vergote are participles of state, which
were formed in Şemitic languages (as can be seen, first of all, in
Akkadian) according to the pattern $*C_1aC_2(i/u/a)C_3-$, but not accord-
ing to the pattern $*C_1\bar{a}C_2iC_3-$. Second, the pattern of active par-
ticiple $*C_1\bar{a}C_2iC_3-$ is not even Common Semitic, being absent in
Southern Peripheral and Ethio-Semitic languages, and thus certainly
not to be assigned to Common Afrasian.

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However, it is quite evident that the scarcity of prefixes and suffixes in Egyptian ought to have stimulated the development of inter-fix patterns (just as in Semitic), i.e. vocalization patterns for diverse *nomina agentis*, *nomina actionis*, adverbials, etc., including those which could function as predicates and functionally corresponded to Semitic, Berber and Old Cushitic verbal forms. Egyptian did not possess a prefixal verbal conjugation, however it did have some word-forming prefixes; its word-forming patterns were hence typologically similar to (but not identical with) the Semitic, as shown by J.Osing [Osing 1976].

2.6. In all branches of the Afrasian language family there is a considerable amount of verbal roots with one "weak" root consonant, i.e. ', u, or i, and also n, whose origin as a root formative morph is generally accepted at least in the beginning of the root. Probably, the "weak" root consonants ', u, i and also n were used in order to adapt biconsonantal roots to the triconsonantal pattern, necessary for the arrangement of vocalic infixes according to certain established patterns of vocalization (a good example of change by analogy).

In fact, there are in Semitic languages biconsonantal verbal roots (usually having long vowels but not necessarily in all the forms; length is in all probability secondary). But every possibility is used to adapt them to the triconsonantal pattern (u, i or ' is considered as one of the root consonants, depending on the quality of the long vowel in the root — $\bar{u}$, $\bar{i}$, or $\bar{a}$).[7]

The situation in the oldest Egyptian was quite similar.

In Berber and especially in the Cushitic and Chadic languages there are a lot of verbal roots which are traditionally considered as biconsonantal (W.Vycichl even considers this phenomenom to be a special feature of 'Hamitic' languages which opposes them to the Semitic ones). But all these languages belong to the Late Stage and, as a rule, they have lost the original "weak" consonants *u, *i, *' (and *H^w) as well as, most often, the laryngeal and pharyngeal consonants. So there is reason to infer that the majority of verbal roots were triconsonantal also in these languages. At the same time in most triconsonantal roots only two consonants (most often the first two consonants) play the most important part as far as semantic distinctions are concerned. As to the third consonant, it functions as a "complement" which partly modifies the semantics.

In certain cases the situation is more clear. Thus, verbs with u- as the first radical were sometimes obviously formed from the corresponding biconsonantal roots; verbs with the first radical i- are, in the majority of cases, but a variety of the verbs with the first radical u- and often alternate with them. In some Semitic languages the verbs with the first radical u- have completely coincided with the verbs with the first radical i-. (In general, the sonants u/u and i/i were, as it seems, allophones of a single phoneme. This assumption allows to explain quite a number of types of word-formation, in particular in the Cushitic and Chadic languages.) Imperatives and *nomina actionis* of the verbs with the first radical u- often preserve the primary form of the stem, viz. two consonants with a short vowel between them.

Another category of primary roots is, as was noted, composed of roots with two consonants and a vowel, which is placed either between them (*mediae infirmae* or "empty") or after them (*ultimae infirmae*).[8] In this case, in order to adapt the root to the triconsonantal pattern, a consonant, viz. $-u-$ or $-i-$ (depending on the quality of the primary vowel which, in turn, may depend on the transitivity or intransivity of the verb) is inserted (or just represented by vowel length) either in the middle or in the end.[9] The degree of consistency in the adaptation of the triconsonantal pattern varies in the different Semitic languages; quite often the forms of the 'verba mediae infirmae' may not phonetically be assigned to a triconsonantal pattern.[10] On the other hand, if the vowel depended only on transitivity or intransitivity, i.e. was only a vocalic infix, it should not be a long one, because grammatical inflexion is here in principle represented by short vowels. The form of Akkadian '*i-mūt*, Arabic *ia-mūt-u* with long $\bar{u}$ (derived from a hypothetical *ia-$m\mu ut$-*) is hardly caused by phonetic reasons, because in Akkadian u + vowel yields a s h o r t u; as to Arabic, a combination of phonemes u + u should there theoretically be preserved. Probably, the length was caused by the fact that the inflexional vocalization of the biconsonantal root, as it originally was, even at that time required length of the vowel, in order to obtain the prosodic levelling to the corresponding form of the triconsonantal root. However, some Semitic languages retain relics with a short vowel in the "empty" ('verba mediae infirmae') roots, cf. n. 9.

The "weak" radical ', u, i may be an actual primary radical of the verb. In this case it is preserved in all forms (Akkadian '*i-š'al* 'he asked'; '*u-parri*' 'he dispersed') except where this was not possible because of general phonetic rules (Akkadian '*īmur* < *iV-'*mur* 'he saw'). However, the "weak" radical is more often but virtual, being reflected only by the quantity of the corresponding vowel in the process of adaptation of biconsonantal roots to the triconsonantal pattern (Akkadian '*i-bāš* 'he shamed himself'; however, in Aramaic *b'š* 'to be false, bad' the ' is pronounced (also in Akkadian '*i-b'iš* 'he smelt bad'). Also n may be either a real radical consonant or an original prefix, or else it may be used as a means of adaptation to the triconsonantal pattern by analogy with the original prefix.[11] The situation with the verbs where the "weak" consonant is the last radical, is similar. There, too, a complete correspondence with the would-be triconsonantal patterns usually does not obtain.

Finally, it is evident that those triconsonantal verbal roots, in which the third radical is identical with the second (*verba secundae geminatae*), were formed on the base of biconsonantal roots. It is proved not only by the existing irregular forms, but also because the last radical may alternate with other consonants ("complements"), i.e. Akkadian *dbb 'to speak' // Ancient Hebrew *dbr; Akkadian *$šll$ (< *sll) 'to capture' // Arabic *slb*, etc. There is no reason to see here either an assimilation or a dissimilation.

In Old Egyptian there is a widely spread type of verbs with two radicals. They cannot be considered as verbs with a lost second or final radical *u or *i, because of certain phonetic reasons. The

Egyptian verbs with actual medial u, i (in the Old Egyptian dialect)
are completely adapted to the triconsonantal pattern, and always
preserve u and i (except cases where their loss is caused by regul-
ar phonetic laws, or by specific orthographic reasons).

The Egyptian verbs with the third radical u or i reveal their
secondary origin by the inconsistency in the formation of the dif-
ferent derivatives, e.g. certain denominative forms based on rela-
tive adjectives in $-i-$. These forms also differ from the biconso-
nantal forms proper.

2.7. Thus, biconsonantal verbal roots undoubtedly did exist in
Common Afrasian. But the majority of verbs do have three radicals,
neither of which belongs to the group of "weak" consonants (i.e.
is neither u, i, ', nor n).

Nonetheless it is possible to demonstrate that such verbs, at
least in the overwhelming majority of cases, are the reflexes of
original biconsonantal root nuclea (cf. above, examples on the
alternations *dbb// *$db-r$, *sll// *$sl-b$). We have already pointed
out that the function of main semantic distinction obviously belongs
to only two consonants (usually the first and the second, sometimes
the second and the third).

Probably, the third radical, auxiliary in its origin, was ag-
glutinated after the preceding vocalic inflexion which, in turn,
was automatically transformed into internal inflexion. Similar
"complements" to originally monosyllabic roots did also exist in
Indo-European.

The rise of the all-embracing system of highly developed inter-
nal inflexion in Semitic languages, and in Afrasian languages in
general, must in any case be referred to deep antiquity, and to the
time of the existence of the ergative construction, when a simple
form of the non-augmented nominal stem (absolute form) was simulta-
neously both a root and the most common nominal form, viz. the re-
gular expression of direct (absolute) case. The prohibition of the
formation of roots and stems with biconsonantal final clusters may
be explained only by the existence of a zero case, because these
clusters do not violate the laws of Afrasian syllable-formation
when they precede vocalic case inflexion. But when the forms of
declension with outer vocalic inflexion emerged (especially the
Nominative case in $-u$), this constant outer inflexion should have
preserved the root of the verbal noun from the penetration in it
of any auxiliary vocalic elements.[12] In the absence of forms with
zero flexion, infixation of vowels, so widely spread in Afrasian
languages, would probably not have been possible.

2.8. The early rise of this abundant, well-developed and all-
embracing system of internal flexion is the main reason for the
unique features of the Afrasian root. As part of the root nucleus
CVC the vowel (in majority of cases it was, probably, /a/) had
only minor significance as means of semantic differentiation in
comparison to the consonants, and could be substituted by interior
vocalic inflexion. This meant, that the original patterns of root-
formation had very restricted capacities as means for the enrich-
ment of the vocabulary. The number of potential roots was practical-
ly equivalent to the number of combinations of consonants by two
minus incompatible combinations: one should, e.g. take into account

the phonetic incompatibility in one root of consonants close to
each other as to the locus of their articulation.[13]

Thus, not only the widening of the vocabulary on the basis of
the already existing stock of lexical stems was necessary (this
process was based on the interior inflexion whose function was to
define more precisely the semantics), but also an augmentation of
the number of the lexical roots themselves. As word-compounding
(with the exception of reduplication) was a rare phenomenon in
Afrasian languages from the oldest times[14], an increase in the num-
ber of roots was needed in order to enlarge the vocabulary. It was
achieved through the lengthening of biconsonantal root nuclea up
to triconsonantal roots, and later on, also via "secondary" onoma-
topoeia (cf. below, n. 13).

Probably the main means of formation of third radicals, apart
from the formal adding of "weak" consonants ', μ, i, n (and ') and
full or partial reduplication of the root, was the expansion of
the root by means of originally morphological elements. A gram-
matical origin of certain radicals is quite clear — thus the initial
n-, t-, i-, ' - < $š$-, in some African Afrasian languages also m-, are
derived from pronouns or verbal stem affixes (cf. below). But in
the majority of cases the grammatical origin of the "complements" is
not apparent, because the morphemes in question have long ago lost
their productivity. Sometimes it is also possible to interpret h-
and (in Berber) b- in initial position as former affixes, but the
origin of the "complements" in the final position is not yet explain-
ed, except for in certain names of animals and in case of $*-k$ which
seems to express instantaneous action.

An analogy to these and some other phenomena may be found in
some later features of the Hausa language: za 'to go', $zaikake$ 'to
depart, to set off suddenly'; $ha\mu$ 'to rise, to go up', $ha\mu ra$ 'to
clamber'; $kama$ 'to hold', $kamata$ 'to be obliged'. Possibly also
other phenomena played their part in the formation of the third
"strong" radicals, for example, metathesis.[15]

The lengthening of the root could also take place via consonan-
tization of syllable-forming sonants which were transformed into
an additional radical consonant. As it seems, the majority of quadru-
consonantal and quinqueconsonantal verbal roots were formed in this
way (apart from cases of simple reduplication of biconsonantal roots
and rare cases of word-compounding). Sometimes the root could be
lengthened by adding "expressive" consonants, i.e. Arabic $laḥisa$ 'he
licked', $*las$ 'tongue'; Arabic $fūh$- 'fragrant'; $f(\mu)h$ 'to spread (of
smell)'; $f(\mu)h$ 'to blow (of wind)'; Saho-'Afar fug-$\bar{o}$ < $*fu\gamma$ 'spirit,
god'.

Whether it is possible to regard Ancient Semitic languages as
actually reflecting the Common Afrasian conditions or not, it should
be important to point out that a huge amount of derivative nouns
(especially the *nomina actionis*, or so-called *masdar*'s) as well as
of adjectives, is formed in Semitic from verbal roots. They follow
certain patterns, each pattern having specific semantics of their
own. No vocalization pattern is fortuitous, but it corresponds to a
particular semantic set: name of action or state, participle of
action, participle of state, name of profession, name of place,
name of instrument, etc. Apart from vocalization, a considerable

part in the formation of these nouns is played also by prefixes, especially $*mV-$, $*tV-$, $*šV-$, seldom $*\underset{.}{i}V-$. Of course, in living languages of the Late Stage, differences between pattern semantics are obliterated to a considerable degree, and the pattern + semantic correlation rules are not followed quite so strictly.

2.9. All this concerns only the v e r b a l nouns, including those derived from denominative verbs. As we see, there were a great number of completely different patterns of vocalization of these secondary nouns. This is of major importance for the analysis of Egyptian, Cushitic and Chadic languages. In Egyptian, in all Chadic and in the majority of cases also in Cushitic languages, the verb either consists of a verbal noun plus a copula which was conjugated according to a pattern similar to that of the Ancient Semitic and Berbero-Libyan verb (in Cushitic), or (in Egyptian and probably in Chadic) it is formed on the base of attributive or prepositional constructions. From this it may be inferred that in distinction from the Semitic and Berber verbs, as well as from Cushitic verbs of the so-called strong conjugation, all the other Cushitic verbs may have practically arbitrary vocalization, because it depends on the vocalization of the pattern of the verbal noun to which the copula is attached; but in turn the vocalization of each separate 'verbal' noun may have at that diachronic level been determined by the same rules as the nominal vocalization in general; i.e., theoretically, also a primary noun could function as the base for the secondary verbal form. A somewhat smaller choice of allowed verbal vocalization patterns is to be expected for Old Egyptian and Chadic, because possessive constructions which were used there as verbal predicates, may not have been formed with any arbitrary deverbative noun, but probably only with participles, masdars, or nouns with a similar meaning.

2.10. As we have seen, apart from deverbative nouns there are nouns belonging to the primary nominal stock. The vocalization pattern of these nouns is of no semantic value. This may be easily demonstrated by comparison of a list of primary nouns with the vocalization patterns cited above.

Thus, the Semitic pattern $C_1aC_2C_3-$ designates the product, object or result of action, but it is not possible to include in this group $kalb-$ 'dog', $qarb-$ 'intestine', $'ain-$ 'eye', etc.

The pattern $C_1iC_2C_3-$ designates notions connected with a verbal action, but it is not possible to include here $*ži'b-$ 'wolf', $*kibr-$ 'bank, shore', $*tis'-$ 'nine', etc.

The pattern $C_1a\bar{C}_2\bar{a}C_3-$ designates names of profession, but it is not possible to include here Akkadian $gamm\bar{a}l-$ 'camel', etc.

It is easy to multiply the examples. A number of vocalization patterns in the group of primary nouns do not have any counterparts in the group of deverbative semantic patterns.

The fact that the primary nouns are not deverbative (in opposition to the second group of nouns) is obscured in Southern Semitic languages by the ease of creation of denominative verbs. The latter may be formed there practically from any noun, so that sometimes it may be difficult to tell, in what case the noun is original, and in what case the verb. The situation here is still more complicated because primary nouns change their vocalization in the process of

formation of plurals, diminutives and other derivatives. The specific position of the group of primary nouns may here be seen only in the fact that their semantics do not correlate with the semantic type of the corresponding vocalization pattern of deverbative nouns. In this, the situation is the same as in Northern Semitic languages.

But in Northern Semitic languages of the Ancient stage, as we have already pointed out, the vocalization of the primary nouns is, as a rule, constant, and denominative verbs from them are not so easily derived. So, in the great majority of cases, the nouns of the primary group are not related to verbs at all. It is a specific group of nouns as regards their word-formation, its main feature consisting first of all in the preservation of the original root vowel.

The all-embracing system of interior vocalic inflexion in the Semitic languages brought enormous possibilities for word-formation, and this has made other means unnecessary.

There is however one more widely used means of word-formation, viz. suffixation without alternation of stem vowels. But these suffixes are very few: $-\bar{a}n-$ with individualizing semantics (Akkadian $rabi(\underset{\cdot}{i})-$ 'big', $rabi'-\bar{a}n-$ 'governor of a town', $šulm-$ 'peace; greeting; felicity', $šulm-\bar{a}n-$ 'congratulatory gift'); and the suffix of relative adjectives, marking also the (place of) origin (the so-called $nisbah$) $-i\underset{\cdot}{i}-$ with variants $-a\underset{\cdot}{i}-$, $-a\underset{\cdot}{i}\underset{\cdot}{i}-$, $-\bar{a}\underset{\cdot}{i}-$[16]: Akkadian $mahr-i\underset{\cdot}{i}-$ 'first, the one before'; $'aššur-i\underset{\cdot}{i}-$, $'aššur-\bar{a}\underset{\cdot}{i}-$ 'Assyrian'; $šub(a)r-i\underset{\cdot}{i}-$ 'Subarean'; $*\bar{e}kall-\bar{i}-t-$ 'palace woman, harem woman', etc. Cf. also below, on the function of the feminine gender marker.

In historically documented Semitic languages of the Ancient and Middle stages, word-compounding is practically unknown. Full reduplication is also seldom used.[17] Both these means of word-formation are much more widely used in other languages of the Afrasian family, in particular, in the Cushitic and Chadic ones, which also have several productive affixes proper to them and unknown to Semitic languages. Means of enrichment of the repertory of verbal lexemes with the help of prepositional and locative preverbs and postverbs are also lacking in the latter. Thus, all resources of stem-formation in Semitic languages are created solely by interior vocalic inflexion in combination with a restricted number of affixes probably of pronominal origin. This results in the stability of the Semitic root and stem: any positional alternations of consonants and vowels lead to the destruction of the semantic correlations of the derivative lexemes. That is why positional (phonotactic) alternations may be observed in an appreciable number only in the Semitic languages of the Late Stage, when the structural principles of the Semitic, and the Afrasian languages in general, are no more relevant.

A particular situation is observed in Cushitic languages where there is a great variety of completely different types of word-formation, which vary not only from one subbranch to another but even inside these subbranches. These processes took probably place at the stage when Cushitic had split up into subbranches or into units of an even lower level. This fits the notion about the general lack of homogeneity in Cushitic which, perhaps, must be classified not as a single branch, but as several branches of the Afrasian family;

it might be also reasonable to treat it as a 'family' or even 'super-family' in the Afrasian 'phylum'.

In this place we have not touched upon the stem-formation of the conjugated verbal forms; this topic will be treated below. Its principles are similar to those of the stem-formation of the verbal nouns.

<div align="center">REFERENCES</div>

[1] A complement usually occupies the position of the third radical consonant, but sometimes also of the first one. It may often be a survival of a 'stirps' affix (see infra).

[2] These roots may also preserve traces of the gemination of the second radical, cf. for Chadic [Porkhomovsky 1972, 22—27].

[3] Quite often the vowel preceding the last root consonant in the imperfective (in Akkadian in the perfective) is considered as such root vowel. But this description of the phenomenon, at least in case of triconsonantal roots, must be regarded as artificial; the vowels in the two forms are apophonic, so that none of the two in the opposition *perfective: imperfective* (or *punctive: durative*) can be regarded by right as the original one. The problem is connected with the question, whether there exists an 'original' grammatical form among the different Ancient Semitic (or Ancient Afrasian) finite verbal forms, or the system of apophonic verbal forms came into being from the very beginning of the existence of the Afrasian verb as such.

[4] As it seems, these patterns may have resulted from the infixation of an original diminutive suffix $(-\bar{a}/-a\underline{i}$, etc.). We consider as diminutive a large group of patterns which are vocalized according to the types: $C_1\underline{i}/uC_2\bar{a}C_3-$, $C_1\bar{\imath}/\bar{u}C_2a\underline{i}/\underline{u}C_3-$, $C_1aC_2a\underline{i}/\underline{u}C_3-$. Apart from the diminutive meaning proper, these patterns could have cajoling, respectful or, vice versa, pejorative semantics. At the earlier stages of Afrasian languages these patterns have been productive, and had a rather wide semantic range: thus, Sem. *$\mathord{,}il\bar{a}h-$ (alongside of $\mathord{,}il-$) 'god', *$\mathord{,}in\bar{a}s-$ (alongside of *$\mathord{,}ins\text{-}\bar{a}n-$ 'man', and *$nis\text{-}/\underline{n}\check{s}-$ 'people'; also in Cushitic); Akk. $su\underline{h}\bar{a}r-$ '(servant) boy, lad', $\underline{s}u/a\underline{h}\bar{\imath}r-$ ($<$*$sV\underline{h}a\underline{i}r-$) 'small child' (alongside of $sa\underline{h}r-$ 'little'); Arab. $\underline{k}ula\underline{i}b-$ 'little dog' (alongside of $kal\text{-}b-$ 'dog'; cf. Berb. $ta\text{-}funas\text{-}t$ 'cow' (cajoling) $<$ *$pans$ — diminutive *$pun\bar{a}s-$ 'particoloured(?)'. It is possible that also the Berb. $a\text{-}rgaz$ $(i\text{-}rgaz)$ 'man' $<$ *$rug\bar{a}z\text{-}(?)$ also belongs here.

[5] J.Greenberg has shown that an analogous development is proper to Afrasian languages as a family [Greenberg 1955a].

[6] Cf., however, *$li\underline{u}\mathord{,}\text{-}at-$ 'cow', possibly $<$ *$li\underline{H}^{\underline{u}}(a)t-$, as variant of *$li\mathord{,}\text{-}(a)t\text{-}$?

[7] For example, Arab. $\underline{i}a\text{-}q\bar{u}m\text{-}u$ '(he) gets up' as if from the complete triconsonantal root *qum, $\underline{i}a\text{-}t\bar{\imath}b\text{-}u$ '(he is) pleasing, getting better) $<$ *$t\underline{i}b$ (but in other Semitic languages also *$t\underline{u}b$ and *$t\mathord{,}b$) etc. Cf. the Hebrew verbal forms $q\bar{a}m$ $<$ *$qama$, $qam\text{-}t\mathring{a},\,\underline{i}a\underline{i}\text{-}\underline{i}a\text{-}qom$ with short vowel.

[8] On the origin of the *verba ultimae infirmae* from CVC—type roots see Diakonoff, Proto-Afrasian and Old Akkadian (forthcoming).

[9] If such a root had really been originally triconsonantal, the variants $*\underset{\sim}{i}a-C_1C_2u/i/a(C_3)-$ should have existed here too, as they exist in triconsonantal verbs proper, depending on transitivity, cf. below. In such a case we would get different patterns of vocalization independently of the quality of the second radical, $*u$ or $*\underset{\sim}{i}$. But in fact, the radical always corresponds to the vocalization, i.e. there is no verb with u-vocalization and $*\underset{\sim}{i}$ as the second radical, or with i-vocalization and $*u$ as the second radical. This means, that in the process of transition to the triconsonantal pattern the second radical was chosen in correlation with the vocalization which already existed by that time in the biconsonantal root, and may have had a grammatical meaning. The same is true of the verbs with the third "weak" radical.

[10] In Egyptian, in the triconsonantal roots, which were formed by the insertion of the sonants $\underset{\sim}{i}-$, $u-$ in the place of the first radical, the choice of sonant depended, as it seems, on the original vocalization of the biconsonantal root morpheme. That is why they often correspond to Semitic *mediae infirmae* roots, i.e. the roots with a supposed sonant $*-\underset{\sim}{i}-$ or $*-u-$ as a second radical. This correspondence of phoneme sequences has been revealed by Anna G. Belova and will be further on referred to as "Belova's law".

[11] It may happen that etymologically the same verbs have actual radicals ', u, $\underset{\sim}{i}$ in some of the languages but belong to *verba mediae infirmae* in other languages. Thus, in Old Egyptian $*m(u)t$ 'to die' is a triconsonantal verb, though this is obscured by the spelling; but in Akkadian and Hebrew it is a *mediae infirmae* verb. The verb $*\underset{\cdot}{s}uh$ 'to laugh, to cry joyously' has a triconsonantal pattern in Hebrew, but in Akkadian, Ugaritic and Arabic ($\parallel \underset{\cdot}{s}\underset{\sim}{i}h$) it is a *mediae infirmae* verb. Such examples are rather numerous, and this indicates that the adaptation of biconsonantal verbal roots according to the triconsonantal pattern took place after (or also after) the Common Semitic stage, and was different in the different languages.

[12] On the Absolute case in $-\emptyset//-a$ and the Afrasian ergative see below. There is no possibility to discuss here in detail the theory of word-formation and inflexion elaborated by J. Kuryłowicz [Kuryłowicz 1958; 1961]. The author discusses the well-established Semitic verbal stem, where the vocalization has only morphological functions, and the hypothetical primary root-vowel is already lost, and he demonstrates the apophonic character of the vocalization of the Semitic verb. However, apophony cannot be traced in the original nominal word-formation patterns in Afrasian languages.

[13] It is necessary to point out a very interesting phenomenon which is rather widely spread in Semitic languages (especially in Arabic) but not unknown in other language families. This phenomenon consists of semantic connection between phonetically (acoustically or articulatorily) close roots, which are not regular reflexes. Thus, cf. the following root series in Arabic: *ksr*, *ksf*, *qsm* (the original root $*q/kac$-?); *qṭ'*, *qṭṭ*, *qṭl* < $*qṭl$ (the original root *qaṭ*-?); *ǧdd*, *ǧd'/'*, *ǧdm*, *ǧzz*, *ǧz'* (the original root $*gaǧ$-?). All these roots have the meaning 'to cut off', 'to tear', 'to break off', 'to strike off', 'to kill', 'to divide', etc. Cf. in Akkadian *qāt*- (< $*qāt$-) 'hand' and the verbs *kss* 'to cut off', *ksp* 'to break up', *gdm* 'to castrate', *gzz* 'to clip, to cut (hair)', etc. This pheno-

menon have been studied in our country by N.V.Jušmánov, S.S.Maizel',
A.Yu.Militarëv [Maizel' 1983; Militarev 1973], but a comprehensive
explanation has not yet been suggested. Probably this is a case of
onomatopoeia, not only direct (imitation of natural sounds) but also
secondary (imitation of already existing roots, cf. Russian *bryznut'*,
prysnut', *dryznut'* 'to sprinkle'; etc. Only one verb out of these
three is an old one). It is also quite evident that phonic incompa-
tibilities valid for one dialect, but not for another, also played
their part, as well as interdialectal loans; the influence of
women's speech is also possible. Women's speech is clearly dist-
inguished in archaic languages as Yana, Chukchee, Sumerian and a
number of others. In other languages the phenomenon has been much
less studied. However, in the Beyrouth dialect of Arabic, ' is a
"men's sound", and in women's speech it is replaced by '(D.O.Edzard,
personal communication). Be it as it may, the phenomenon in ques-
tion is yet one more means of word-formation, not studied before,
and which is probably diachronically rather late.

[14]   Root- and stem-compounding is rather widely spread in Ber-
ber languages. But it is quite rare in Semitic and Egyptian, and is
possible there only for primary biconsonantal roots. As to the
Cushitic, Omotic and Chadic languages, it is difficult to distin-
guish the word-compounding there from addition of affixes (mostly
suffixes) which have lost their productivity.

[15]   For accepting a hypothetical metathesis, it is necessary
to try to explain its causes, in order to avoid arbitrary compari-
sons of distantly similar roots based only upon an unjustified
surmise of a spontaneous metathesis (such comparisons are not infre-
quent in special literature).

[16]   In some Chadic and some other Afrasian languages (e.g.,
Egyptian) $-u\chi a-$, $-a\chi a-$ is used instead of or along with $-i\underset{\ }{i}a-$,
$-a\underset{\ }{i}a-$.

[17]   Note that a l l Semitic roots of the $C_1C_2C_1$-pattern derive
from geminated $C_1C_2-C_1C_2$ forms.

THE NOMINAL CATEGORIES IN COMMON AFRASIAN

§ 1. Gender and nominal classes

3.1.1. The Afrasian languages usually distinguish the categories of noun, adjective and numeral. The adjectives are differentiated from the substantives mostly by syntactical means but also in the formation of the plural. It seems reasonable to suppose that at the Proto-Afrasian stage the adjective did not have a separate existence as a part of speech.

3.1.2. In the Afrasian languages there are traces of what can be possibly interpreted as remains of a complex system of nominal grammatical classes which existed in prehistoric times; subsequently they became lexicalized (fossilized in particular words). It is likely that the suffix $-(a)b-$ served as a marker of the class of harmful animals (in Cushitic and Chadic the same function was, possibly, fulfilled by the suffix or prefix $m-/\mu-$): Common Semitic $kal-b-$ 'dog'; Common Afrasian $*\check{z}i'-b-$ 'wolf, jackal'; Common Semitic $*\check{c}a'l-ab-$ 'fox' (dimin. $*\check{c}u'\bar{a}l-$); $dab-b-$, $dub-b-$ 'bear'; $'arn-ab-$ 'hare'; Eg. db 'hippopotamus'; Common Afrasian $*x^{(w)}V'\underset{o}{r}-\parallel *'Vx^{(w)})\underset{o}{r}-$ 'scorpion' > Common Semitic $'aqr-ab-$; Cush. Bilin $k^{\hat{w}}\partial r-ad-a$; Iraqw $x\hat{e}['\,]$ $er-a\hat{n}-w$ 'scorpion'. The sonants $-r$, $-l$ could denote the class of, respectively, domesticated and wild useful animals: Common Sem. $*\check{c}au-r-$ 'bull'; $'imm-ar-$ 'ram'; $^{\chi}li\hbar-r-$ 'sheep, ewe'; $'a\underset{.}{i}\underset{.}{i}-al-$ 'deer', etc. As a matter of course, many animal names derived from epithets do not have such markers, e.g. Sem. $'alp-$ 'bull, ox; cattle' which means lit. 'trained, domesticated'. Generally speaking, the old class-indicators have left more or less clear traces only in Semitic languages. Possibly, in this group is to be included the element $-n-$ (meaning obscure): Common Sem. $*\hat{c}a'-n-$ 'sheep and goats'; $*'u\check{z}-n-$ 'ear' (< Afrasian $*H^w\partial\check{z}-$ 'to hear'); Arab., Ga'az $bad-(a)n-$ 'trunk, corpse' (< $*bad$); Common Afrasian $*b\underset{o}{i}/\underset{o}{\mu}-n-$ 'interval, space' (< Afras. $*b\underset{o}{i}/\underset{o}{\mu}$ 'to enter'); Akk. $tar-n-$ 'mast'; Chad. Ngizim $t\check{u}k\grave{u}-n\acute{o}$ 'pounded fish' (Afras. $*tak^w-$ 'to pound, crush'), etc. The suffix $-(a)t-$ which has later evolved into a mark of the feminine gender must have also belonged originally to the nominal class-suffixes.

3.1.3. Quite independent of the class-indicators system (that was rather unproductive already at the Proto-Afrasian stage) there existed a binary gender system ('old' gender markers) with the masculine marker $-\underset{.}{i}/\underline{y}$ and the feminine marker $-\underset{.}{H}/-\underset{.}{i}$. Since $\underset{.}{i}$ and $\underline{y}$ seem originally to have been allophones, it is possible that the difference between the two markers was that of stress (corrective vs. extended?), later developing into a quantitative opposition: masculine > $-V\underset{.}{i}/-V\underline{u}$ (or $-\underset{.}{i}V/-\underline{u}V$), feminine > $-\bar{a}'/-\bar{a}\underset{.}{i}$. In Semitic the masculine marker has left a trace only in the masculine pronoun *$\check{s}u-\underline{u}a$, and the feminine, e.g. in some Arabic nouns in $-\bar{a}\underset{.}{i}$, $-\bar{a}$. These forms, ending in a vowel, cannot be very old because they violate the Common Afrasian rules of syllable contacts. In Cushitic Agaw we encounter the forms masc. $-\underset{.}{i}$, fem. $-a$; thus often also in Chadic. In Berber we have masc. $u-$ (v. infra) in the nominal prefixes of the *status annexus*, in Omotic (Kafičo) there is a nominal suffix masc. $-\bar{o}$, fem. $-\bar{e}$. In Old Egyptian the ending of the masculine nouns $-V\underline{u}$ was quite well preserved in the singular; it is common in the plural ($-w$ [*$-\bar{a}-\underline{u}-$]) even after its loss in the singular; perhaps by analogy, it was introduced into fem. pl. $-w-t$ [$-\bar{a}\underline{u}\bar{a}t-$]. (For another possible explanation of the last form, v. § 3.4.2.)

More often the feminine marker *$-\underset{.}{H}$ was ousted by the morph $-(a)t-$ (this usually later developed into $-ah > -\bar{a}$). It is found almost everywhere in Afrasian, though it occurs only in a few of the Chadic and Cushitic languages. Its secondary function as a gender—marker is noticeable because of its different position, compared with the archaic gender-indicators, in the suffix chain [Gelb 1969].

3.1.4. While the gender distribution in the Indo-European languages is semantically obscure, in Afrasian, and more particularly, in Semitic it is more clear: the fem. in $-(a)t-$ is characteristic of females (Akk. *šarr-* 'king' — *šarr-at-* 'queen'; *kaššāp-* 'sorcerer'— *kaššāp-t-* 'sorceress'; Arab. *šā'ir-* 'poet' — *šā'ir-at-* 'poetess'); of nouns with singulative meaning (Arab. *naml-* 'ants' — *naml-at-* '(one) ant'; Hebrew *'onī* 'ships' — *'onī-ā́* 'ship'); of diminutives (Akk. *nār-t-* 'a rivulet'; often in proper names); of objects that play a passive role in society — for instance, objects of an activity: Akk. *zitt-* < *$zawiz-t-$ 'share' (< *zuz 'divide'); *lubuš-t-* clothing'; *šalam-t-* 'corpse'; *tarbī-t-* 'offspring'; cf. Bedawye *šā'* (masc.) 'cow', but *šā'* (fem.) 'beef'; of abstract notions (Akk. *damiq-t-* 'the good'; *puluḫ-t-* 'fear').

Some very old words denoting female beings are derived from a different root (compared with their masculine counterparts) and quite often lack the feminine morph: Sem. *'ab-* 'father' — *'imm-* 'mother'; *$ḫimār-$ 'donkey' — *'atān-* 'a female donkey'; cf. also Arab. *ḥāmil-* 'a pregnant woman', without a feminine marker. Similarly in Berber and other languages.

Under this heading can be included the names of body parts that exist in pairs or in even numbers: Sem. *'aḭn-* 'eye'; *'uẓn-* 'ear'; *$ḭad-$ 'hand'; *sinn-* 'tooth'; nouns denoting places, ways, natural phenomena (Akk. *ḫarrān-* 'road, path, expedition, campaign, caravan'; *nār-* 'river'; Ugaritic *špš*, Arab. *šams-* 'sun'; Arab. *'arḍ-* 'earth', cf. Akk. *'erṣ-et-*; Hebrew *'īr* 'town'). The attribution of these nouns to the feminine gender becomes manifest only in grammatical

concord. There is also a residue of feminine nouns whose semantic
motivation remains obscure. Quite often they show vacillation in
gender, or their gender varies in the singular and the plural.

§ 2. Case

3.2.1. The reconstruction of the Proto-Afrasian case system is
fraught with difficulties: in Egyptian the vowels found no repre-
sentation in writing, while the Berbero-Libyan, Chadic, Omotic and
the overwhelming majority of the Cushitic languages have been re-
corded only at the Late Stage, after having lost, for the most
part, their external inflexion.

3.2.2. Special attention must be paid to the fact that the
basic character of the Semitic nominative case is quite different
from its Indo-European counterpart, though most of the his-
torically attested Semitic languages are characterized by the no-
minative — accusative type of sentence construction. The nominative
case marker $-u$ in the Old Semitic languages was used exclusively
to denote the subject. All other functions of the Indo-European
nominative — those of expressing the noun without precise gramma-
tical connections (e.g., in nomination, counting, address, etc.)
or the nominal predicate — were in Semitic originally carried out
by a special form with the zero marker $-\emptyset$ (sometimes $-a$). It re-
sembles the 'absolute case' in the languages with the ergative
sentence construction, i.e. languages with a leading opposition
'action vs. state', or 'transitive vs. intransitive', and where
there is no explicit direct object or accusative case. These are
languages where a special oblique ergative case marks the subject
of an action (or the subject of a transitive verb). The subject of
the state — including the state that results from an action, i.e.
the direct object — as well as a noun with no grammatical connec-
tions, and very often the nominal predicate are in ergative langua-
ges expressed by the absolute case — usually with a zero marker. As
we shall see further on, Proto-Afrasian explicitly marked the dif-
ference between action and state. Thus, it seems reasonable to sup-
pose that the Old Semitic nominative $-u$ had its origin in a Proto-
Afrasian case denoting the subject of action that was in opposition
with the zero case (or the case with the $-a$ ending). The latter at
that period not only denoted the noun outside of grammatical links
(the so-called *status indeterminatus*) or the noun-predicate (the
so-called *status praedicativus*), but also the subject of a state
or condition, including the subject of the state that resulted from
an action.

This is the situation that we can observe in several Cushitic
(Bedawye, Oromo, Sidamo) and Omotic (Ometo) languages; in Semitic
$-a$ denotes the direct object (accusative), but in Old Akkadian and
in Amorite, it is, as a relic, also attested for the absolute case.
In the Semitic languages of the later periods (but still at the
Ancient Stage) the absolute case was split into the $\emptyset$-case *(st.
indeterminatus/praedicativus)* and the direct object case (accusa-
tive) ending in $-a$. In Cushitic, only in the Oromo language the
case in $-\emptyset/-a$ has the functions of the accusative. In the Omotic

Ome :o language the zero case retains some connotations of the accusative; in the Cushitic Sidamo this case can also be used for the subject of a state.

If we take into account that in Proto-Afrasian there was no phonemic opposition between the vowels /i/ and /u/, the conclusion is that at that stage there existed a binary opposition of two so-called 'abstract' cases characterized by the $-i/-u$ and $-\emptyset/-a$ markers.

3.2.3. The best preserved case—not only in the Old Semitic languages but in quite a number of Cushitic ones—is the case with the $-i$-ending. In Cushitic it functions as a 'relation case'. Often it has two variants: a short one in $-i$ and an 'expanded' one in $-i\underaccent{\smile}{i}a$, $-\bar{i}$. In the first instance it mostly denotes the relationship of the attribute to the determinatum, i.e. it is semantically equivalent to the genitive. The second variant can have a broader spectrum of functions. It was this 'expanded' form that developed into the special morpheme of the relative adjectives (nisbah) in all of the Afrasian languages; these adjectives usually denote affiliation. The nisbah usually takes the form $-i\underaccent{\smile}{i}(a)-$ but, especially in some Chadic languages, it can also appear as $-u\underaccent{\smile}{i}a-$; this fact once more stresses the original identity of the case with the $*-u$ and the $*-i$ endings.

The nominative (originally ergative) case in $-u$ is attested in Semitic alone; only Somali has $-u$ as an allomorph of $-i$. On the contrary, the nominative (or ergative) with the $-i$-ending is well attested in Cushitic, e.g. in Saho, Oromo, Sidamo, and others. Such languages have developed special morphemes for the genitive, as $-u$ in Sidamo, etc.

3.2.4. The preservation of the formal identity of the ergative and the genitive in $-i$ seems to explain the rise of the possessive sentence construction in Egyptian. Since the subject of the action is denoted by a case in $*-i$, overtly identical with the genitive, possessive phrases can be regarded as equivalent to conjugated verbal forms. The person of the subject is marked by the possessive (genitival) pronominal suffix; for the 3rd person, however, this is true only if the sentence does not contain a noun denoting the subject. If it does, no pronominal suffix is used at all, because the genetival form in $*-i$ was probably assumed by the subject-noun itself. But with the predicate of state (stative), which was also originally a nominal form with the $-\emptyset/-a$ ending, the subject was naturally denoted by the direct case of the pronoun, since the 'direct' case in the ergative languages is actually the absolute case of the subject of state.

3.2.5. By the time when Proto-Semitic came into existence the vowels /i/ and /u/ had already become phonemically distinct, and a differentiation could take place: $-u$ became the marker of the subject case, and $-i$ of the genitive. At the same or a somewhat later time the $-\emptyset/-a$ case was split. Although at the oldest stages of Old Akkadian, as well as in Amorite, the ending $-a$ could still denote the st. indeterminatus or praedicativus, later $-\emptyset$ came to denote the absolute form, and $-a$ was used for the object-case alone; at an earlier stage it had denoted the subject of a state resulting from an action. Such a situation can be presumed for the whole SCB

group; moreover, this situation must have obtained when the pre-
fixal conjugation developed for the predicative word (= verb) deno-
ting action (both transitive and intransitive). At that stage the
following original 'abstract' cases can be assumed for Proto-Semit-
ic and for Cushitic:

Proto-Semitic		Eastern Cushitic	
Nom.	$-u$	(Erg.)	$-i$
Gen.	$-i$		$-u$, $-i$ (and others)
Acc.	$-a^1$	}	$-\emptyset$ // $-a$
Abs.	$-\emptyset$		

3.2.6. Along with the 'abstract' cases denoting the subject-
object and attributive relations in the sentence, one can surmise
the existence of locative (space) markers already at the Proto-
Afrasian stage. The traces they have left are rather scanty; it is
also possible that in this category some secondary developments
have taken place, as, e.g., in Cushitic. These markers developed to
case markers from prepositions (or postpositions, depending on the
prevalent word order).

We can assume the following cases with reasonable certainty:

$-V\check{s}$, $-\check{s}V$: locative-terminative, dative. It is well attested as
$-i\check{s}$ in Akkadian and Amorite, as $-a\check{s} > -ah > -\bar{a}$ in other West Semi-
tic languages, including Eblaite, Ugaritic, and Hebrew, as well as
in Epigraphic South Arabian. It is also abundantly attested as da-
tive or locative in some Cushitic and Omotic languages, e.g. Bilin,
Aungi (as accusative), Ometo, and others;

$-dV$, $-Vd$: comitative, dative. It is attested in some of the
Agaw (Cushitic) languages; as a preposition—in Berbero-Libyan;

$-kV$: the ablative and comparative case, as evidenced by some
Cushitic and Omotic languages; is used as a preposition in Semitic;
functions as a demonstrative pronoun (and article) in several Cushi-
tic languages; in many Chadic languages, also as a demonstrative
element in the verb;

$-Vm$: locative-adverbialis; in Akkadian has the form $-um$ where
$-m$ is an original functional part of the morph, not the mark of
mimation (i.e., the old article, v. § 3.6). But in course of time
this $-m$ was apocopated, just as in the case of mimation;

$-l$: directive (in the Cushitic Bilin, Saho); the Semitic 'da-
tive' and 'directive' preposition $lV-$ (also > prefixed accusative
marker in the later Aramaic dialects), and the Egyptian preposition
n ($< *l-$);

$-p$ (also $-f$): ablative (in Omotic); conjunction, demonstrative
pronoun in other languages.

§ 3. Status

3.3.1. In Semitic, Berbero-Libyan and, probably, in Egyptian
the noun acquired a special nominal category, that of status. It
is an inflexional category depending on the syntactic role of the
noun. The number and the character of the statuses varies in indi-
vidual languages. They were differentiated by the structure of the

declensional forms and by the stem-vowels; their vocalization depended on phrase stress.

3.3.2. Among the Semitic languages the status-system was most developed in Akkadian. In this language the following statuses are distinguished:

st. rectus, the declinable form which is assumed by a noun when it has no substantive or pronominal attribute; but it can have an adjective as its attribute. The noun can denote the subject (in the -*u*-case), object or circumstance (in the accusative -*a*-case or in a locative case). In this status, there can also occur nominal attributes in the -*i*-case, and nouns in the -*i*-case governed by a preposition;

st. constructus, the construct (conjunct) form of the noun that is determined by another noun in the genitive. Originally the *st. constructus* forms could be declined; but quite early the noun lost its case markers (among the 'abstract' cases, the genitive in -*i* had been retained longer); it is combined with its attribute in a single syntagm with a common dynamic stress;

st. pronominalis, the form assumed by the noun before a pronoun, i.e. when combined with a pronominal suffix. Essentially, it is a variety of *st. constructus*, but the case endings had here been preserved till a later date; in the genitive the ending was always retained, since the case marker -*i*- was characterized by dynamic stress (or, more probably, by contour accent). Perhaps, in the nominal forms with a long vowel in the final syllable of the stem, the tone was shifted to the case ending before the pronoun; owing to that, the case-endings were preserved, e.g., *šarr-ū*, *šarr-ī* 'king', pl.nom. and gen./acc., st.pron. *šar'r-ū-šu*, *šar'r-ī-šu* 'his kings'; *hīt-u* (< **hiṭ'-u* 'sin', st. pron.nom. sg. *hī't-ū-šu*, *hī'ṭ-ī-šu*, *hi'ṭ-ā-šu*; *ša'dū* (< *šadda'-u-m*) 'mountain' st.pron.nom. sg. *šad'ū-šu*, gen. *šad'ī-šu*;

st. indeterminatus, the form when the noun functions as predicate or has no grammatical links with other parts of the sentence. It is a survival of the old absolute case in -*a*/-∅ (the case of the state as opposed to action), and it usually has a zero ending. But depending on the various functions of this status, its endings can be slightly modified so that sometimes one can differentiate between *st. praedicativus* and *st. absolutus*, instead of a single *st. indeterminatus*.

3.3.3. In Hebrew, a language of the Middle Stage, only three statuses are attested, because of the loss of external inflexion:

st. absolutus, corresponding to the Akkadian *st. rectus* and *st. praedicativus*;

st. constructus, characterized by vowel change (contraction) and usually bearing only secondary stress;

st. pronominalis, which often preserves the original vowels of the stem.

Ex.: *st. abs. mal''āk* (< **mal'ak-*) 'messenger, angel'; *st. constr. mal''ak̲*; *st. pron. mal'ā'k-ố*; *st. abs. 'sēpār* (< **sipr-*) 'book'; *st. constr. 'sēpār*; *st. pron. sip̄'r-ố*.

3.3.4. In Arabic three statuses have remained: (1) *st. rectus* when the definite article *'al-* is absent, and the so-called nunation after the case ending is preserved; (2) *st. determinatus*,

with the definite article, no nunation and case endings preserved;
and (3) *st. constructus*, never preserving the nunation. Because of
the weakness of dynamic stress in Arabic no vowel contractions take
place.

3.3.5. An entirely different system of statuses developed in
Berbero-Libyan. When functioning as attribute and as subject of the
verb in the type of sentence where the subject follows its predi-
cate, the noun assumes the so-called 'annexed' status *(st.annexus)*.
Such a noun retains its natural gender markers, both prefixed and
suffixed, that have probably developed from an ancient type of ar-
ticle: masc. sg. *u-gəllid* 'king', pl. *u-gəllid-an*, fem. sg. *tᵊ-gəl-
lid-t* 'queen', pl. *tᵊ-gəllid-in* (Old Lib. *V-gld,* fem. **t-gld-t̲*). In
the other instances the noun is in the so-called 'free' state *(st.
liber)*, and takes on a secondary, article-like morpheme (which,
however, has by now also lost its determining function): usually,
in the masc. sg. *a-gəllid*, pl. *i-gəllid-an*, fem. sg. *ta-gəllid-t,*
pl. *ti-gəllid-in*; other patterns also exist. In particular, those
nouns whose initial consonant *(*h, *ʾ, *Ḥʷ, *u̯/i̯, *ʿ, *ḥ)* has been
lost at the Middle or the Late Stage, have a constant vocalic ini-
tial whose quality depends on the lost consonant. This vowel quali-
ty is retained both in the *st. annexus* and in the *st. liber*; in
most cases it is identical in both numbers. The vowel of the former
secondary article has usually no influence upon this vocalic ini-
tial, and in the *st. annexus* the gender marker is, naturally, pla-
ced before it. Thus, in the masc. *st. annexus *u̯+a- > ua-, *u̯+i- >
i-; *u̯+u- > u-*, and in the *st. liber a-, i-,* or *u-*, depending on
the original consonant *(*h-, *ʾ-, ḥ-; ʿ-; i̯-; u̯-)*. The fem. nouns
of that group in both statuses begin with *t-a-, t-i-, t-u-*.[1]

This is the basic picture in the main North Berber languages
but there are exceptions and divergences in individual languages.

3.3.6. The Cushitic languages present complex and heterogene-
ous systems of statuses, depending on the syntactical role of the
noun. But because of the great variety of Cushitic data and lack
of sufficient study it is still difficult to reconstruct archetypes.

The category of status was present in Egyptian— the *st. con-
structus*, at any rate —but the deficiencies of the system of wri-
ting hamper its study.

We should like to note that this category must owe its appearan-
ce, to a large extent, to the development of paradigmatic tones and,
later, of the dynamic accent. In the pitch-accent (tone) languages,
such as Chadic and many of the Cushitic ones, the syntactical posi-
tion of the noun in the sentence often influences the pitch-contour
of a word-form, rather than provokes changes in vocalization, vowel
contraction, etc.

§ *4. Number*

3.4.1. Originally, in Afrasian there were distinguished the
singular, the dual, and the plural numbers. But the dual was alive,
in historical times, only at the earliest stage: in Semitic (Old
Akkadian, Eblaite, Ugaritic, literary Arabic), as well as in Old
Egyptian. Among the Middle Stage languages it is quite well attest-

ed in Hebrew; all other languages at that stage of development, as well as the Late Stage languages display some isolated, stray survivals; Aram. *tərên* 'two'; Berb. Tašəlḥit *mərau-in* 'twenty'; Chad. Logone *marar-en* 'breasts', etc.). The dual was formed by the morphemes *-ā-* (in the direct) and *-ǵ-* > *-aǵ-* (in the oblique cases), placed after the gender marker, but before the mimation/nunation (v. § 6), if the latter was present.

3.4.2. The oldest plural marker was apparently *-a-/-ā-* after the gender marker, or — and quite often — infixed before the final consonant of the nominal stem: sg. masc. $*C_1VC_2C_3-[(a)u-]$, pl. either $*C_1VC_2C_3-\hat{a}$ *-u -*, or $*C_1VC_2-\bar{a}-C_3[-(a)u]-$; sg. fem. $*C_1VC_2C_3-$ *(a)t-*, pl. $*C_1VC_2C_3-\hat{a}-t-$. This pattern of plural formation has been traced in detail in various Afrasian languages by J.Greenberg [Greenberg 1955a]. As it seems, this *-a-* (or, rather, *-â-*) bore a contoured accent; because of that, in some Southern Peripheral Semitic languages this vowel was split into two syllables, and the plural was formed according to the type: masc. *-áhà-na* (or *-áhù/ì-na)*, fem. *-áhà-t-u*. Traces of contour-accent on the plural morph can be seen in Akkadian: pl. fem. *-ā-t-u-m̐* (i.e., *-â-t-u-m?*) st. pron. *-ā-t-î-šu*. Cf. also Aram. *-āуā-t-ā*, alternative pl. fem. to *-â-t-ā*; on the origin of the Egyptian fem. pl. *-wt* (=[-āуāt-]?), which may also belong here, see also § 3.1.3 and 3.4.3 below.

3.4.3. The system of plural formation by consistent affixation of *-a-* in its unadulterated form has not been attested in the documented languages.[2] The most ancient of them, Old Egyptian and Old Akkadian, had developed other types of plural formation that had come about through analogy. Since the morpheme *-āt-* was perceived as reflecting plurality by means of lengthening the vowel of the gender marker *-at-*, likewise the masc. plural in Old Akkadian began to be formed by lengthening the vowel of the final morpheme: sg. nom. *-u*, gen. *-i*; pl. nom. *-ū*, gen. *-ī*.[3] (Similar processes can be reconstructed for the rest of Semitic.) On the contrary, since the Old Egyptian morpheme combination *-āу-* (masc. pl.). had been interpreted as a unitary marker of the plural, the feminine plural began to be expressed pleonastically by the morpheme combination *-āу-āt-* (for an alternative explanation of the form see above); analogous formations occur here and there in Chadic[4], Berbero-Libyan[5] and in some of the Semitic languages, for instance, in Aramaic.

3.4.4. As we shall see later on, both in singular and plural the suffix *-m/*-n*, similar to an article, could be added to the noun (the so-called mimation/nunation). In the plural, owing to the analogy with the other plural morphemes, this suffix was 'lengthened' to *-ma/*-na*.[6] Having lost the determining function, and in the course of the decline of the case system, the *-m/-n* after the case ending in the singular disappeared everywhere: it was, however often retained in the plural, without preserving any article-like function, but showing a shortening *-ma/*-na > -m/-n*.

3.4.5. It must be stressed that in the dual and in the plural — as far as we can judge by the oldest attested Semitic languages — only two abstract cases were always distinguished: nom. *-ū*, gen.-acc. *-ī*. (This may have been a survival of a situation which originally obtained also in the singular, v. § 3.2.2.) The following forms of the plural are attested in the texts:

Eg.: masc. *$\bar{a}\mu$-i (?), fem. *-$\bar{a}\mu$-$\bar{a}t$-i (?);
Akk.: masc. -$\bar{u}$/-$\bar{\imath}$ (without mimation); fem. -$\bar{a}t$-u-m[7]; -$\bar{a}t$-i-m;
Ugar.: masc. -$\bar{u}$-ma/-$\bar{\imath}$-ma; fem. -$\bar{a}t$-u/-$\bar{a}t$-i (without mimation);
Hebr.: (with lost declension): masc. -$\hat{\imath}m$; fem. -$\hat{o}t$ (without mimation);
Arab.: masc. -$\bar{u}$-na/-$\bar{\imath}$-na; fem. -$\bar{a}t$-u-n/-$\bar{a}t$-i-n;
Berb.-Lib.: a) Old Lib. (where declension seems to have disappeared): masc. *-$\bar{a}$-n; fem. *-$\bar{a}t$-in (> *-$\bar{a}hin$, *-$ah\bar{\imath}n$?)[8];
   b) Neo-Berb.: masc. -an, -$ən$; fem. -in.

The same endings are attested in other Afrasian languages, usually along with various innovations.

3.4.6. Some Afrasian languages possess a special system of adjective plurals, e.g., in Akkadian: masc. -$\bar{u}t$-u-m (where -$\bar{u}t$- at the same time functions as an abstract suffix in the singular of the feminine nouns), fem. -$\bar{a}t$-u-m. In Arabic the old method of plural formation is used only with adjectives and participles. In other cases the so-called 'broken' plural is regularly used.

§ 5. 'Broken' plural

3.5.1. The 'broken' plural, or *pluralis fractus* is a means of forming the plural with the help of internal, mainly vocalic inflexion. It is most characteristic of Arabic where there are numerous different types of such plurals, as well as of Southern Peripheral and Ethio-Semitic languages. But to various degrees this means seems to be present in all of the Afrasian branches; cf. in Semitic: Arab. *qalb*- 'heart' — pl. *qulūb*-; *baḥr*- 'sea' — pl. *'abḥār*-; *ma-rkaz*- 'center' — pl. *ma-rākiz*-; the same in modern loanwords: *bank* 'bank' — pl. *bunūk*; *žurnāl* 'journal' — pl. *žarānil*; it is much rarer in North Semitic: Akk. *'alak-t*- 'way, behaviour' — pl. *'alkak-āt*-; *ṣeḥr*- 'small' — pl. *ṣeḥḥer-ū*. In Cushitic: Bedawye *kām* 'camel' — pl. *kam*; *ebrīk* 'coffee-pot' (loan-word) — pl. *'ebrik*; Afar *ēriān* 'cloud' — pl. *eriāmo*; Saho *lelle* 'day' — pl. *lellā'e*, *lala'*; Iraqw *xa'āno* 'tree' — pl. *xa'i*; Alagwa *xa'imo* 'tree' — pl. *xa'ē*. In Berber: *a-gadir* 'fortified depot, fortress' — pl. *i-gudar*; *a-fus* 'hand' — pl. *i-fass-ən*; Kabyle *a-duggµal* 'relative through marriage' (< *hā-daµµāl-) — pl. *i-dul-an*; *ta-sir-t* 'hand-mill' — pl. *ti-siar*. In Chadic: Hausa *'akuia* 'goat' — pl. *'auakai*; *sirdi* 'saddle'— pl. *siradda*.

3.5.2. These forms are heterogeneous in their origin. The possibility of their existence and wide diffusion is quite understandable when we consider that the internal inflexion (vowel change) has always been the most productive and habitual means of derivation and inflexion in Afrasian, though the ways and methods have been different. One of the most important ones was the infixation of the commonest external plural marker -a-. This phenomenon is well known to Semitologists from the Hebrew material: *kälåb* 'dog' < *kalb-, pl. *kəlåbîm* *kalab-ī-ma. Its widest extent is attested in Berbero-Libyan.

The broken plural in Semitic has been used since the earliest times in Southern Peripheral (and Ethio-Semitic) languages, but only a few models have become common, mainly, of the type *'a-$C_1C_2\bar{a}C_3$-*, *'a-$C_1C_2\bar{u}C_3$-* (*'a-* < Proto-Semitic *ša-).

The wide application of internal flexion as a means of word-formation has resulted in the appearance — in Semitic and probably in other Afrasian languages — of a series of noun patterns denoting collectivity, generalization, etc.[9] that are semantically parallel to older noun patterns denoting individual phenomena. It is those pairs that were used — especially in Arabic — to express the singular and the plural; secondary types of vocalization have in the end almost totally ousted the original kinds of morphologically expressed plurality in the substantives. It is characteristic that between the vocalic pattern of the singular and the pattern of the corresponding **broken** plural there does not seem to exist any regular correlation. The broken plural is, essentially, not a morphological but a lexical category. It is no fortuitous coincidence that in Arabic the broken plural forms request the same agreement as feminine forms in the singular, and that this is a characteristic of abstract nouns in general.

It is impossible to establish common patterns of the broken plural not only for Afrasian generally, but even for Proto-Semitic. Those patterns have evidently developed for similar reasons but differently in various languages and at various — but always relatively late — times.

Thus, in Chadic we come across various forms of the plural that originated under substratum influence, e.g., Hausa *ba-haṵsa* 'a Hausa man', pl. *haṵsa-ṵa*. In Cushitic and Omotic there are other secondary types of plural formation, probably also derived from collective nouns and the like, but from such as were formed by using prefixes or suffixes.

§ 6. Mimation (nunation) and the article

3.6.1. The oldest form of nominal determination by means of an article is, evidently, the so-called mimation/nunation, i.e. the addition of a determining pronominal element *-m/*-n (pl. *-ma/*-na). This postpositional element can be added to the ending of only 'abstract' cases. Its determinative character is evident from the fact that in Old Akkadian which fully preserves the mimation in all other instances (except masc. pl. nouns), it is absent in the *st. indeterminatus* and often in proper names. However, already by the end of the Old Akkadian period the mimation lost any grammatical meaning.[10] For some time it was retained to distinguish the masc. sg. in *-u(-m)* from the plurals in *-ū*; the latter ones seem to have been losing vowel length for reasons of phrase intonation. Though well-trained scribes made no mistakes in the use of mimation during the Old Babylonian period, it was only reserved in writing mostly by way of historical orthography. Mimation in the singular disappeared early in Ugaritic, too, and in Hebrew it vanished before the loss of the case endings, except for the masculine plural.

3.6.2. In Classical Arabic, nunation *(tanwīn)* was retained but underwent a peculiar functional development. As seen from the foregoing (3.3.4), in Arabic, a noun determined by another noun or a pronoun, or an article, did not acquire nunation — exactly because nunation by itself was a kind of determination, and double determi-

nation would have been redundant. With the gradual weakening of the determining function of nunation, Arabic introduced a new preposed article *il-* *(< *han/l-)*. It was used with such nominal forms which were not determined by any other means — by a noun in the genitive, a pronominal possessive suffix or nunation. For this reason nunation came to be contrasted with the new definite article and was transformed from the definite into an indefinite article.

3.6.3. Traces of nunation/mimation — at least, in the plural — are clear in Berbero-Libyan, more obscure in Chadic. It remains uncertain whether it had ever existed in Cushitic and Omotic. It was certainly missing in Egyptian.

3.6.4. Definite articles are attested in many Afrasian languages, and can be either preposed or postposed. Preposed are e.g., the Arabic *al-*, the Hebrew *ha-* with gemination of the following consonant, i.e., evidently developed from **han* or **hal* (?); postposed is the Aramaic **-(h)ā > -ā*; subsequently, like earlier the nunation, the Aramaic article lost its determining function and, after the loss of the category of status in Aramaic, it became a universal means of noun-formation. All these articles derive from the demonstrative pronouns **hā*, **hann-*, **kV* and the like.

Egyptian produced its own article at an early stage from the demonstrative pronouns **pV*, **tV*, **nV*. In Berbero-Libyan, articles appeared at two consecutive periods, but already by the time of Old Libyan both the earlier and the later articles had lost their determining function and were retained — as we have seen — only as status markers. However, they are still retained as separate words masc. *ụa*, fem. *ta*, in the Tuareg group. In Cushitic, Omotic and Chadic, articles are very rare. However, they are present in Beḍawye (where they are identical with the oldest Berbero-Libyan ones surviving in the *st. annexus*), in Somali (*kV-*), in Sidamo (*-hV < -kV-*), etc.

§ 7. Numerals

3.7.1. A common Afrasian system of numerals cannot be reconstructed. Most widely occurring stems are **fVdS*, **-fVrS* (where the final "weak" sonant is unclear) meaning 'four', and **čVn* 'two': Semitic **čin- > *ṭin-*, Berbero-Libyan *sin* and Egyptian *sn*. But in Cushitic this root has the meaning 'likeness, like' (Bilin *sänā*) or 'twins' (Iraqw *daṅgi* ?).

Some numerals still retain traces of the original semantics deriving from counting on fingers, e.g., the Common Cushitic and Common Omotic **lam'-* 'two' (< 'index-finger')[11]; Eg. *dy* 'five' (< 'pertaining to hand'); Sem. *ḫams-* 'five', originally '*handful, compact group', cf. Akk. *ḫamāsu (< *ḫms)* 'to flex, crook hand or foot'; Arab. *ḫamīs-* 'group, troop'. Here also belongs Berb.-Lib. *summus* 'five' where the anlaut was changed to alliterate with **sids* 'six' (a rather frequent phenomenon in the history of numerals, cf. Slavonic **devę^nti < *newę^n-* 'nine' like **desę^nti* 'ten'); further, Eg. *md* 'ten' ~ Sem. *ma'd* 'many'. Other numerals of the first decade might have originated from specific names of individual fingers.

3.7.2. In the great majority of cases each branch (family) of Afrasian developed its own system of numerals, and their etymolo-

gies remain obscure. Borrowing of numerals occur quite often; thus, many of the Berber languages have partly or completely adopted the Arabic numerals. The systems of numerals are decimal everywhere.

3.7.3. Anomalies in the concord of numerals are frequent; for instance, the feminine form of a numeral agrees with the masculine form of a countable noun; certain groups of numerals agree with the object counted as adjectives, other groups as genitival attributes, and still others as attributive apposition. Quite often with a numeral a noun in the singular is used.

§ 8. Prepositions and Postpositions

3.8.1. We discuss prepositions together with the nouns since originally all of them belonged to the category of nouns; partly, perhaps, to verbal nouns.

3.8.2. It is usual to subdivide Semitic and Egyptian prepositions into primary ones, of obscure etymology and used procliticallly, and secondary ones, whose nominal origin is more or less clear. But in fact, 'primary' prepositions also derive from nominal forms. Thus, the common Semitic preposition *bV- 'in' (absent only from Akkadian and Eblaite) has its origin in Proto-Afrasian *bḭ- 'a place; to enter'. In Eblaite, and in some Old Akkadian surviving forms, a few prepositions preserve traces of declension: 'in 'in' − 'in-a 'to'; ʕašt-u, ʕašt-a 'from' − ʕašt-i 'with'. In Egyptian, possessive adjecatives (nisbahǝ) could be formed on the basis of prepositions, e.g., n and n-y.

Finally, the nominal nature of the prepositions is apparent from the fact that all prepositions in Semitic and, perhaps, in Egyptian, govern the nominal genitive, that is, they form an attributive syntagm together with the noun they govern. In Old Akkadian the instances when a preposition requests a locative case are very rare and ought to be considered pleonastic.

3.8.3. Along with prepositions, postpositions also exist in Afrasian languages. They occur mostly in Chadic, Cushitic, and Omotic, and must be connected with the difference in the word order.

It has not been possible to discover prepositions common in that quality to all the Afrasian languages: they must have come into existence rather late, at the level of branches (or families). The earlier postpositions develop into case-forms. Cf. § 3.2.6.

REFERENCES

[1] The accusative could also denote the object of the verbs of movement, i.e., it could be used in a locative (and temporal) function.
[2] In Cushitic and Chadic of the Late Stage this characteristic formation has been altered by phonetic processes to such an extent as to become quite unrecognizable: Cush. Somali pl. fem. -o(d); Chad. Bade pl. fem. -t, -ēt, and many others; possibly, cf. Hausa hanḭa 'road', tuta 'banner', pl. hanḭ-oǯi, tut-oǯi (?).

³ However, one could also regard Akkadian (but not, e.g. Hebrew or Arabic) pl. masc. $-\bar{u}$, $-\bar{\imath}$ as having developed < *$-a-u$, *$-a-i$. Such a form can anyway be reconstructed for Old Aramaic: pl. masc. *st. constructus* $-\hat{e}$, st. *determinatus* $-ai\bar{\imath}a$ (< *$-a\underline{\imath}$, *$-a\underline{\imath}-h\bar{a}$), but *st. pronominalis* $-\hat{o}-h\bar{\imath}$ < *$-au-h\underline{\imath}$; the two cases of the plural $-au$ and $-a\underline{\imath}$ are preserved in the 1st millennium B.C. Para-Aramaic dialect Ya'udī in North Syria.

⁴ The Chadic plurals in $-a$ (< *$-\bar{a}$), $-\bar{a}$: Hausa *ẓaro* 'boy', *ma-ḳeri* 'smith' — pl. *ẓara*, *ma-ḳera*. Similarly in Cushitic (e.g., in Beḍawye). In some cases, however, we may suspect that a final consonant was lost.

⁵ According to A.Basset, the Berbero-Libyan pl. masc. ending $-(a)uən$, fem. $-(a)uin$ had been originally used exclusively with nouns with a final $-u$ of the stem: *a-məksa* < *a-məksau* 'herdsman', *ta-məksau-t* 'shepherdess', pl. *i-məksau-ən*, *ti-məksau-in*; but later they were expanded to other derivational types.

⁶ In terms of evolution, the development was, probably, in the reverse direction: by functioning as an article, the enclitic suffixed demonstrative pronoun *ma* was shortened in the sing. to *$-m$/*$-n$.

⁷ In Akkadian there occurs the form of masc. pl. $-\bar{a}n-\bar{u}$ which originally had been used as the plural of concrete units and only later became an allomorph of the usual plural marker. The endings $-an$ (masc., Berber), $-an$ (masc., Cush. Beḍawye), $-n$ (masc., Chad. Bade), etc., can be interpreted as the same morph, or as an old plural in $-\bar{a}$ plus nunation. The same is the case with one of the many forms of the plural in Arabic: *'asuad-* 'black', pl. *sūdān* 'the (land of the) blacks; Sudan'.

⁸ In Old Libyan the ending of fem. pl. $-tn$ was probably vocalized as $-\bar{a}tin$. A masculine (!) plural $-tin$ is preserved in some Late Stage dialects.

⁹ Some patterns of the broken plural obviously derive from such nouns; e.g., the pattern $C_1aC_2aC_3-t-$ in Akkadian denotes an abstraction: *ṭāb-t-* 'goodness', *uabar-t-* 'a foreign trade-colony'; cf. in Gə'əz *nagas-t-*, pl. of *nəgūs* 'king'. Pattern $C_1iC_2\bar{a}C_3-$ conveys plurality: Arab. *kitāb-* 'written signs, text', hence 'book', but cf. *kilāb-* — pl. of *kalb-* 'dog'. Pattern *$\check{s}a-C_1C_2\bar{a}C_3-$ denotes the possession of a quality, usually in the highest degree: Akk. *ša-pšāq-* 'greatest difficulty', *ša-rbāb-* 'loss of strength, paralysis', *ša-lbāb-* 'anger, angry'; in Arabic *'a-bḥār-* pl. of *baḥr-* 'sea'.

¹⁰ Akkadian never developed an alternative article, as did most of the other Semitic languages; this might be due to the fact that there was no article in the substratum.

¹¹ Note Aungi *lanā* 'finger, hand; two'; Beḍawye *lumi* 'finger'; Oromo *e-lema* (prefixed?) 'index finger'; in most of the other Cushitic languages the word means 'two'.

CHAPTER FOUR

PRONOUNS

§ 1. Personal pronouns

4.1.1. Personal pronouns in Afrasian can be classified into
subject, possessive, and object pronouns (there also exist oblique-
object pronouns). All of them can be independent or enclitic (suf-
fixed). In most Afrasian languages the pronominal stems have a
common origin.

4.1.2. The independent personal pronouns in the direct (absolu-
te) case may be introduced by a special demonstrative element: Sem.
'an-, Eg. in- and nt-, Berb. n-, nt-, Cush. an, a-.[1] In Chadic,
there is extensive prefixation of demonstrative elements to the
independent personal pronouns, e.g., in Western Chadic Karekare:
d(V)-, in the Angas-Sura group: mV-/wV-/gV-; in Central Chadic
Musgu: tV-. The demonstrative element can be suffixed as well, but
it can also be completely absent.

The nominative form of the independent pronouns does not fun-
ction as the subject of a sentence; the subject is rendered by a
pronominal prefix or suffix of the verb. The independent nomina-
tive case is used rather for purposes of emphasis or singling out:
'it is I that...', 'I, for my part...', 'as far as I am concerned',
etc.

4.1.3. The independent, as well as other personal pronouns
distinguish number (singular, dual[2], and plural) and person (1st
and 2nd). The 2nd person pronouns have separate gender forms —
masculine and feminine. For the 3rd person a demonstrative pronoun
is always used; in Semitic, Berbero-Libyan, and Egyptian the lat-
ter is derived from the common stem *šuў(a) (masc.), *šiȳ̆(a) (fem.)
(see. Table 1).

Some Cushitic and Chadic languages retain archaic forms of
inclusive ('we, i.e. you and myself') and exclusive pronouns ('we,

but not you'); the stem of the former can be reconstructed as *$hVnV$; of the latter — as *nV. The Semitic 1st. p.pl. combines both stems (*$nahnV$).

4.1.4. Possessive, object and oblique-object independent pronouns have been preserved as a coherent system in Akkadian[3]; in some Afrasian languages of the Late Stage these categories are obviously of secondary origin.

4.1.5. Essential for the understanding of the original Afrasian language structure in general are the Egyptian independent pronouns. In the classical Middle Egyptian there are two sets of independent pronouns — 'free' and 'subordinate', and one set of suffixed pronouns:

Sg.	Free	Subordinate	Suffixed
1 p.	*ỉn-k*	*wj*	*-j* ([-ịa])
2 p. m.	*nt-k*	*kw*, later *tw* (*[čuwa]])	*-k* ([-ka])
f.	*nt-t̠* ([-č] < *-kỉ)	*tm*, later *tn* (*[čima, čina])	*-t̠* ([-či] < *-ki)
3 p. m.	*nt-f* ([-f] < *hu < *šu)	*sw* (< *[suụa])	*-f* ([-fu])
f.	*nt-s*	*sj*[3] (< *[siịa])	*-s* ([-si])
Pl.			
1 p.	*ỉn-n*	*n* ([na]?)	*-n* ([-nV])
2 p.	*nt-t̠n* ([-čin])	*t̠n(-w)* (*[či/unV])	*-t̠n* ([-či/unV])
3 p.	*nt-sn*	*sn(-w?)* (*[si/unV])	*-sn* ([-si/unV])

The functional differences among them are as follows: the suffixed pronoun was originally a possessive (genitival) form denoting possession or appurtenance, and also served as the subject in the majority of verbal forms. The 'free' pronoun was at first a form of the direct (absolute) case, and its function was to emphasize the subject of a nominal predicate[4]; the 'subordinate' pronoun, historically speaking, was also a form of the direct (absolute) case, and so expressed the subject of the 'qualitative-stative' form; the latter is an intransitive, a 'stative', and, most likely, an originally nominal form. In some cases this pronoun could also denote the subject of the overtly nominal predicate. When the predicate has the meaning of 'action' — as is usual for the ergative-type languages — the same pronoun denotes the direct object, since the latter was originally perceived as the subject of a state resulting from an action. Besides that, the subordinate pronoun could also express the 'logical' subject in infinitive and adverbial phrases.

INDEPENDENT PERSONAL PRONOUNS
OF THE DIRECT CASE

Number / Person / Gender		Semitic (reconstructed)	Egyptian (free pronouns)	Berber (Tašəlhit)
Singular	1st person	*ʾan-āku, *ʾan-ā, *ʾan-ī	ʾin-k	nki
	2nd person masc. / fem.	*ʾan-ta (< *ʾan-ka?) / *ʾan-ti (< *ʾan-ki)	nt-k / nt-t̲ (/-č/)	kii / kimi
	3nd person masc. / fem.	*šuu̯- / *šiי̯-	nt-f (< *-šu̯-) / nt-s	nt-a/ə / nt-ə-t
Plural	1st person	*na-ḥna/u, *ʾana-ḥna/u	ʾin-n	nkunnə (ж.p. nkənti)
	2nd person masc. / fem.	*ʾan-tumu (< *ʾan-kumu?) / *ʾan-tina (< *ʾan-kina)	} nt-tn (/-čn/)	kunnə / kunəmti
	3nd person masc. / fem.	*šumu / *šina	} nt-sn	nit-ni / nit-ənti

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[1] The presented are the most archaic forms.

[2] Chadic pronouns of the other groups (East, Central Chadic) somewhat resemble Omotic pronouns; both have formed during a long evolutionary process rooted in the proto-language. Some of the pronouns in question have developed from conjugated verbal forms

Table 1

Cushitic[1]		Chadic[2] West Chadic	
Beḍawye	Somali	(Hausa)	(Angas)
aní	*ana, anú*	*ni*	*gnắn (< *g(n)-āni?)* [3]
(newly-developed forms)	*ada, adí (< *ata, *atí)*	*kai* *kē*	*ğ-hā (< *g-kā/g-kʷa) yi (< *g-kʷi?)*
"	*ū (nsa-, isa-)* *aị (iịịa-)*	*šī (< *sī)* *ita*	*nyĭ* (from a different indicative pronoun)
*hanín (< *ḥan-)*	*anna(-ga)* (exclusive) *inna(-ga)* (exclusive)	*mū̄*	*mǘn*
(newly-developed forms)	} *aị-din-ga*	*kū*	*wǘn (< *kʷun?)*
"	} *aị*	*sū*	*mǎ*

of the 'to be' type. Cf., however, the Omotic plural personal pronouns: *nu, (in)no* of the 1st person, *inte/ō* of the 2nd person.

[3] The initial *g-* is possibly derived from the indicative particle *gʷ-* or *k-* also attested in Cushitic pronouns; cf. Semitic ('*an-*).

Number / Person / Gender		Semitic (Akkadian)	Cushitic (Beḍawye)
Singular	1st person	$-ni$	$-h\bar{e}-b-a$ (fem. $-h\bar{e}-b-i$)
	2nd person { masc. / fem.	$-ka$ / $-ki$	$-h\bar{o}-ka$ / $-h\bar{o}-ki$
	3nd person { masc. / fem.	$-\check{s}u$ / $-\check{s}i$	$-h\bar{o}-s$ / $-h\bar{o}-s$
Plural	1st person	$-ni\,{}'\bar{a}t(i)$ [3]	$-h\bar{o}-n$
	2nd person { masc. / fem.	$*-kum\bar{u} > -kun\bar{u}$ $-kun\bar{u}t(i)$ / $*-kin\bar{a}t(i)$	$-h\bar{o}-kna$ / $-h\bar{o}-kna$
	3nd person { masc. / fem.	$*-\check{s}umu > -\check{s}unu$ $-\check{s}un\bar{u}ti$ [3] / $-\check{s}in\bar{a}t(i)$ [3]	$-h\bar{o}-sna$ / $-h\bar{o}-sna$

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[1] Originally, this must have been an object marker, the pronoun base proper ($*-\check{s} > *-h?$) having not been retained.

[2] In these languages object pronouns are not suffixed.

[3] All Semitic languages, other than Akkadian and Eblaitic,

Table 2

Berber	Chadic			
(Tašəlhit)	(Hausa)[2]	(Musgum)	(Logone)	(Mubi)[2]
-ī̢i	ni	-ā	-'ań, -'n	ni
-k -kim	ka ki	-ku(nu) -n(i)	-kú, -ku -kəm	ka ki
-t[1] -s-t	ši < *si ta[1]	— tV[1]	-ní, -nî, -ni -'í, -i	ar —
-(n)a	mu	-yi	-mí	an
-kun -kun-t	} ku	} -ki(ni)	} -kún	} kan
-tən[1] -tən-t[1]	} su	} -di[1]	} -tən[1]	} ke(r)

have lost the marker -t-, -ti, by analogy with the singular, or have retained only its traces (like Phoenician and Gəʻəz). Oblique object pronouns are formed in Akkadian after the pattern šu'āš(i), šunūš(i), etc.

Number Person Gender \ Language		Semitic (reconstr.)	Cushitic (Beḍawye)[1]	Berber (Tašəlḥit)
Singular	1st person	$*-\bar{\imath}$, $-\underset{\sim}{\imath}a$	$-\bar{u}-\emptyset$	$-i$, $-n-i$
	2nd person {masc. / fem.	$*-ka$ / $*-ki$	$-\bar{u}-ka$ $(< *-k^wa)$ / $-\bar{u}-ki$	$-k^1$, $-n-k^1$ / $-m$ $(< *-kim)$, $-n-əm$
	3rd person {masc. / fem.	$*-\check{s}u$ / $*-\check{s}i$	$-\bar{u}-s$ / $-\bar{u}-s$	$-s$, $-n-s$ / $-s$, $-n-s$
Plural	1st person	$*-na/u/i$	$-\bar{u}-n$	$-una$, $-n-na$, $-t-na$
	2nd person {masc. / fem.	$*-kumu$ / $*-kina$	$-\bar{u}-kna$ / $-\bar{u}-kna$	$-un$, $-nn-un$, $-t-un$ / $-um-t$, $-nnəm-t$, $-t-um-t$, $(-n-kun-t)$
	3rd person {masc. / fem.	$*-\check{s}umu$ / $*-\check{s}ina$	$-\bar{u}-sna$ / $-\bar{u}-sna$	$-sən$, $-n-sən$, $-t-sən$ / $-sən-t$, $-n-sən-t$, $-t-sən-t$

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[1] Of the very variable Cushitic forms only the most archaic are presented.

[2] In Buduma the 2nd person distinguishes between masculine $-(u)gu$ and feminine $-yum$.

Table 3

Egyptian	Western (Hausa)	Chadic Central (Musgum)	Central (Logone) masc.	Central (Logone) fem.	Eastern (Mubi)[3] masc.	Eastern (Mubi)[3] fem.
$-j$	$-na$	$-a$	$-\acute{a}-{}^{\jmath}u$	$-na-{}^{\jmath}u$	$-i$	$-j\acute{o}$
$-k$ $-\underline{t}$ ([-č])	$-ka$ $-ki$	} $-ku$	} $-a-ku$	$-na-ku$[2]	$-d\acute{a}$ $-j\acute{\imath}$	$-d\grave{a}$ $-j\grave{\imath}-g\bar{e}$
$-f$ (< *-ǧw) $-s$	$-sa$ $-ta$	$-n-i$ $-n-ita$	$-a-ni$ $-\acute{a}-i$	$-na-ni$ $-na-i$	$-a-t$ $-j\grave{\imath}$	$-d-\grave{\imath}$ $-j\acute{\imath}$
$-n$	$-mu$	$-ti$	$-an\partial n,$ $-am u$[4]	$-na-mu$	common gender $-j\grave{\imath}-n\acute{e}$	
} $-\underline{t}n$ ([-čn])	} $-ku$	} $-ki$	} $-\acute{a}kun$	} $-na-kun$	} $-j\grave{u}-g\grave{u}m$	
} $-sn$	} $-\acute{s}u$	} $-nagai$	} $-\acute{a}-t\partial n$	} $-na-t\partial n$	} $-j-\acute{o}$	

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[3] In many East Chadic languages the deviations from the Afrasian prototype are still more marked.

[4] In Buduma this pronoun is of common gender; $-mu$ is inclusive, $-n(a)i$ is exclusive.

In the grammars of Egyptian it is usually stated that the func-
tion of the predicate — or, more properly, of specifying the person
of the predicate — is fulfilled only by the suffixed pronoun. How-
ever, for the nominal (participial) sentence two parallel construc-
tions are established: they are considered to be identical   in
meaning, though stylistically different: *ink nfr* '(this is) I (who
is) good'; *ink š'd ẓr-t-f* '(this is) I (who has) cut his trunk'; but
ḥ' sw 'joyous he (is)'. In the first two examples the pronoun is
'free', but in the third it is 'subordinate'. Both are considered
to be expressing the subject of the nominal predicate. But compari-
son with Semitic constructions makes it apparent that the pronoun in
the direct cases can denote both the subject and the predicate: Akk.
ḫā'ir atta '(it's) you (who are) the husband' (the personal pronoun
denotes the subject); *annû šū* 'this (one here) is he' (the personal
pronoun denotes the predicate). But the independent pronoun with
the emphasizing particle could not express the person of the pre-
dicate. This is the pronoun that corresponds to the Egyptian 'free'
pronoun of the *in-*, *n-t-*series. There is not preserved in Semitic
any direct correspondence to the Egyptian independent 'subordinate'
pronoun. But, if the forms **'anāku, *'antā, *'antī, *šuya, *šiia*
denote only the emphatical subject, their 'subordinate' counter-
parts *-(ā)ku, -(ā)ta, -(ā)ti* are suffixed personal markers both of
the stative predicate and the nominal predicate: *labš-āku* 'I am
dressed'; *ḫā'ir-āta* 'you are (a) husband'. Moreover, the personal
pronoun *šū* 'he' was used in the Semitic of the Middle Stage as a
predicative copula even with the 1st or 2nd person nominal predicate:
Akk. *'aḫū'a šū* 'you are my brother-he'; Hebr. *'attäm halɔlē ḥarbî
hēmmā* 'you (pl.) are struck by ('of') my sword-they'. The same pro-
cess evidently took place in Egyptian, and so in the phrase *ink nfr*
the 'free' pronoun in fact emphasizes the subject of the nominal
sentence ('it is I who is good'), yet in the phrase *ḥ' sw* the 'sub-
ordinate' pronoun was originally the predicative copula ('he is
joyou*), irrespective of how it was perceived by later speakers.

4.1.6. From the Proto-Afrasian point of view the Egyptian 'free'
and 'subordinate' pronouns are really one. The usual form of the
personal pronoun in the direct case is in Egyptian the 'subordinate'
one. (The 1st p. sg. of this pronoun still needs clarification: is
it a borrowing from the dual?). The 'free' pronoun was originally
an emphasized form in the direct case plus the stressed demonstra-
tive prefix *in-*, *nt-*[5]; so the stem of the personal pronoun itself
was consequently subjected to contraction. Quite analogous are the
Semitic pronouns *'anāku, 'antā,* etc.

4.1.7. It is necessary to discuss in detail yet another archaic
pronominal series in Egyptian which also has parallels in Semitic:

Sg.		Eg.	Akk. (Assyrian dialect)
2nd p.	masc.	*čwt* (* *ču(y)āti*)	*ku(y)āti*
	fem.	*čmt* (* *čimāti*)	*ku(y)āti* (but cf. Berb. *kim*)
3rd p.	masc.	*swt* (* *su(y)āti*)	*šu'āti*
	fem.	*stt* (* *sitāti*)	*ši'āti*

In the Old Assyrian dialect of Akkadian these forms are independent personal pronouns of the common oblique case. In the Babylonian dialect they express the object in the accusative or the genitive. In Eblaite and in Babylonian the independent personal pronouns in the dative are formed on similar lines (with the element -š- instead of -t-; there are Cushitic parallels). In Old Egyptian these forms had already lost their declensional character and were in free variation with the 'free' pronouns (in the direct case). Then they rapidly fell into disuse. Proto-Egyptian seems to have had no special way of expressing the direct object of the verb as distinct from the subject of a state (resulting from an action), and thus did not need independent personal pronouns expressing the direct object. It is probable that these pronouns had originally been used — just as in Old Assyrian — for the common oblique case (including the genitive-ergative).

The oblique cases of the personal pronouns were expressed through prepositions in the earliest Old Egyptian, and thus the independent personal pronouns of the oblique cases died out early. Only the usual 'free' and 'subordinate' pronouns (in the direct case) and the suffixed (possessive) ones survived. This is important for the study of the Egyptian grammar and of the Egyptian language's place among the other Afrasian languages.

It must be stressed that the direct case personal pronoun cannot denote the subject of a verbal predicate, with the exception of the 'qualitative-stative' form (the 'pseudo-participle', or stative). Otherwise this function is fulfilled only by the suffixed pronouns. These latter ones are generally used to denote: (1) possessivity[6], and (2) the subject of the verbal predicate (except the 'qualitative-stative' form). Thus, it is obvious that suffixed pronouns were originally forms of an oblique, namely, of the genitive case.

In other words, in Egyptian the direct case was the proper form for the subject of a nominal predicate and the 'qualitative-stative' form (originally nominal), and for the direct object of an action (as the subject of state resulting from an action). The subject of the verbs of action (including, at first, transitive and intransitive action verbs, and, later, all those intransitive verbs that did not denote quality or state) was put in an oblique, namely, in the genitive case. Putting it differently, in Egyptian the dominant construction was not nominative, but possessive, which is a variety of the ergative construction.[7]

4.1.8. In the other Afrasian languages the personal pronouns in the direct case — usually also emphasizing the subject and the predicate — are often structurally similar to the Egyptian 'free' pronoun. They are also introduced by a special demonstrative particle 'an- (in the 1st and 2nd prs.); in Berber, in some cases, this particle has the form nt-, identical with the Egyptian one. But in other instances in Berbero-Libyan direct case such pronouns are used that formally correspond to the Egyptian 'subordinate' forms. Oblique cases are formed with the help of connective elements of prepositional origin.

4.2.1. In Semitology it is usual to distinguish between the personal (subject) markers of the verb, considered to be its components, and the suffixed possessive, objectival and oblique-objectival pronouns. Suffixed possessive pronouns are used with nouns or with (noun-derived) prepositions as their attributes. The objectival suffixed pronouns are used with verbs, but are not considered to be components of the verbal form. This view is based on the fact that a conjugated verbal form — at least, in the 1st and 2nd prs. — cannot exist without personal subject markers[8], while such verbal forms need not have a nominal object marker; *a fortiori*, this applies to the pronominal markers of the indirect object. But the personal subject indicators in the verb are pronominal in origin, and since we are primarily ·concerned with problems of origin, it is reasonable to treat them here like other pronominal elements. Then we can distinguish in Afrasian affixed pronouns the following five classes: (1) prefixed (prefixed-suffixed) personal subject pronouns used with verbs; (2) suffixed personal subject pronouns (= direct case pronouns); (3) suffixed possessive pronouns (= genitival pronouns); (4) suffixed objectival pronouns; (5) suffixed pronouns of the indirect object (= dative case pronouns).

(1) Prefixed personal pronouns, used with the verb and expressing the subject of action, are absent in Egyptian; according to Newman and Schuh [Newman—Schuh 1974], they do not exist in Chadic either. This must be due to the existence, in the languages in question, of a possessive verbal construction, where the personal subject of a verbal form was expressed by an affixed possessive pronoun (v. infra).

The other languages[9] have the following forms of the prefixed-suffixed personal subject pronouns.

Sg.		Semitic (reconstructed)	Berber (Tašəlhit)	Cushitic (Bedawye, 'old' conjugation)[a]
1st p.		$'a-$ [b]	$\emptyset-...-a\gamma$ [c]	$a-$
2nd p.	masc.	$ta-...$	$t-...-t$	$te-...-a$
	fem.	$ta-...-\bar{\imath}$	$t-...-t$	$te-...-\bar{\imath}$
3rd p.	masc.	$\dot{\imath}a-...$	$i-...$	$*(\dot{\imath})i-,\ e-...$
	fem.	$\dot{\imath}a-.../ta-...$ [d]	$i-/t-...$ [d]	$ti-...$
Pl.				
1st p.		$na-...$	$n-...$	$ni-...$
2nd p.	masc.	$ta-:...-\bar{u}$	$t-...-m$	$te-...-na$
	fem.	$ta-...-\bar{a}/-na$	$t-...-m-t$	$te-...-na$
3rd p.	masc.	$\dot{\imath}a-...-\bar{u}$	$\emptyset-...-n$	$(e)-...-na$
	fem.	$ta-/\dot{\imath}a-...-\bar{a}/-na$	$\emptyset-...-n-t$	$(e)-...-na$

[a] Very similar in Saho, ʿAfar, Somali, and some Agaw languages.
[b] With variants $'i-...,\ ti-...;\ \dot{\imath}i-...$, etc., according to definite rules of apophony.[10]

^c Since the original initial *'a- tended to disappear in Berber, in this case the marker has been transferred from another conjugation type — the suffixal conjugation of the predicative stative (*-ākV, > *-akkV > *-ak̲ > -aγ).

^d There is vacillation in some languages between the i̯a- and the ta- elements for the 3 sg fem. The ta- element is used when the subject is a female being; the i̯a- element corresponds to a noun only grammatically feminine; thus in Berber (Tašəlḥit), in the Old Assyrian dialect of Akkadian, etc.

(2) the suffixed personal pronouns in the direct case are generally distinguished from the independent direct case personal pronouns by the absence of the demonstrative element 'an- (et al.); they are enclitic variants of the direct case pronouns and similar to the Egyptian 'subordinate' pronoun (cf. Table 4). Attested in Semitic, the Berber languages Kabyle, Auǯila, etc., Egyptian, Eastern Chadic Mubi.[11] They can be reconstructed in the auxiliary verb of some Cushitic languages. That verb could enter into concatenation with a noun (or verbal noun) — usually with its stem, — and the resulting form would preserve the meaning carried by the stem, while the auxiliary verb together with its affixed personal pronoun served as a new type of suffixal conjugation.[12] The predicate containing suffixed personal pronouns originally expressed a state that had been achieved and was continuing. On further development see Chapter Five.

(3) the suffixed possessive pronouns are joined to the stem either directly, or by means of a genitival particle: in Berber -n-(-t-), in Beḍawye -(i̯)u-, and others (cf. Table 2).

(4) the suffixed pronouns expressing the direct object are not found in Egyptian. In many Afrasian languages, such as Beḍawye, they are introduced by a special particle (cf. Table 3).

(5) pronominal dative suffixes are attested in Akkadian at the Ancient stage and in the Berber languages. In Akkadian they are characterized by an element -m (a marker of direction of the action), in the plural forms there is present the dative case marker -š, joined to the same stems. Similar forms are found in some Cushitic languages.

(6) Of particular importance is the fact that the prefixed markers of the acting person (in the verb) bear no likeness either to the direct case pronouns, or to the objectival or possessive pronouns. Special attention must be paid to the prefix 'a- of the 1st p. and i̯a- of the 3rd p. (only the former has an analogous counterpart in the pronoun of the 1st p. dative in Akkadian: -a-m). It seems probable that they reflect an ancient o b l i q u e case, not the d i r e c t (absolute) one. But that oblique case was not the accusative or the genitive, but some other. Taking into account all that has been said above about the origin of the Semitic nominative, we should interpret it as the oblique case of the subject of action, i.e., the ergative case (cf. infra, the discussion on the structure of the verb). This corroborates the view that the dominant sentence structure in Proto-Afrasian was ergative. Only in Egyptian (and, originally, in Chadic?) it was replaced by the very similar possessive construction.

Some peculiarities of the personal pronouns can be explained by the evolution of the verbal structure. The attributive construction, as distinguished from the predicative one, has not gone through any essential changes, and thus the system of possessive pronouns in all the branches is almost identical.

§ 3. The nota genitivi

4.3.1. In Afrasian, besides the usual attributive phrase (the determinatum in the *st. constructus* — the attribute in the genitive: Old Akk. *yarad śarr-i-m* 'king's slave'; Aram. *kəsap malk-ā* 'king's silver'), another, descriptive, attributive phrase is also used, on the pattern: 'the slave who is of the king' or 'the slave that-one of the king'. The determinatum (1) is in the *st. rectus* or — when the declension is lost — in the *st. absolutus*; there follows (2) a pronoun, the so-called *nota genitivi*, or *iẓafat*, and then (3) the attribute in the genitive, e.g.: Old Akk *yard-u-m ču śarr-i-m* '(the) slave who (is the) king's'; Aram. *kasp-ā di malk-ā* 'the silver which (of) the-king'; Hausa *asali-n hausa-wa* '(the) origine-which (of-the) Hausa'.

The function of the *nota genitivi* is usually fulfilled by a demonstrative-relative pronoun that is not identical with the 3rd person pronoun (which is, of course, also originally demonstrative). Semitic has a nota genitivi from the stem *š-‖ *č-‖ *ẓ- (> ḏ- > d- or z-; Akk. *č- > š-, in the traditional notation). In Old Akkadian the *nota genitivi* still varied according to gender and person. Egyptian, Chadic and Berber use the stem *n-*, and the gender is usually differentiated (fem. *n-t > t*); and in Egyptian it could even produce a relative adjective *(nisbah)* *n-y, n-y-t*. At the same time the Egyptian *nota genitivi* could function as a preposition; this seems to be a result of contamination with the old Afrasian preposition *lV-* that was preserved in most Semitic languages: *n-* is a regular phonetic reflex of *l-* in Egyptian. In Berbero-Libyan and in Chadic a role similar to that of the *nota genitivi* is played by the comitative pre- or postposition, or conjunction *-d, d-* ('with, and') which has survived also in Cushitic as a case marker.

4.3.2. Sometimes the independent possessive pronouns can be produced by the combination of the *nota genitivi* with a suffixed possessive pronoun. Thus, in Hausa (Chadic):

The possessed object

			masc.	fem.
Sg.	1st p.		*nā-ẏa*	*tā-ẏa*
	2nd p.	masc.	*nā-ka*	*tā-ka*
		fem.	*nā-kī*	*tā-kī*
	3rd p.	masc.	*nā-sa*	*tā-sa*
		fem.	*nā-ta*	*tā-ta*
Pl.	1st p.		*nā-mu*	*tā-mu*
	2nd p.		*nā-ku(m)*	*tā-ku(m)*
	3rd p.		*nā-su(m)*	*tā-su(m)*

4.3.3. Apparently, the same deictic element that had been used for the *nota genitivi*, was also used for the demonstrative prefix in the personal 'free' pronouns, at least, in Egyptian and Berbero-Libyan.

§ 4. Deictic and other pronouns

4.4.1. Along with the demonstrative pronouns that later developed into the personal pronouns of the 3rd prs. and the *nota genitivi*, there are many other pronominal stems in Afrasian that express various deictic degrees. Only a small part of them can be of Proto-Afrasian origin. One may note the pronoun for the proximate deixis; it can be linked with the article Sem. *ha(n)-*, *(h)Vl-*; Eg. *p-*, Cush. *k(w)-*, *b-*, and others. The degrees of deixis can also be differentiated with the help of possessive pronouns, e.g., Arab. *ḏā-li-ka* 'this', lit. 'that-to-thee'; Aram. *də-nā* 'this', lit. 'this-ours'; *ḏēk* 'that', lit. 'this-thine'; Eg. *p-f* 'that', lit. 'this-his'.

4.4.2. The Common Afrasian demonstrative stem *m-* was used for the deixis of the distant and the distant-and-invisible object. In the historically attested Afrasian languages from this element not only the mimation/nunation and the nominal morph *mV-* have been derived, but also interrogative (and indefinite) pronouns, for example, in Semitic: Akk. *man(n)-* 'who?', *mīn-* 'what?'; Hebr. *mî* 'who?'; *mā̊* 'what?'; Aram., Arab. *mān* 'who?', *mā* 'what?'; in Cushitic (Somali): *ma* — interrogative particle, *mā-hei* 'what?'; Berbero-Libyan (Ahaggar): *mi(-t)* 'who', *ma(-t)* 'what?'; Eg.: *m* 'what? who?'; Chadic (Hausa): *me-* (with the copula) 'what?'.

4.4.3. Demonstrative pronouns of the distant-and-invisible deixis sometimes evolved — according to A.P.Riftin — into negative and prohibitive particles, as, e.g., Arab. *mā*. The origin of other negative particles which are quite abundant in Afrasian, remains still obscure.

4.4.4. While the majority of the interrogative pronouns are derived from the **m* stem, there is another stem, producing interrogative pronominal adjectives ('which', 'what'), i.e. **'aiiV-*. It is extensively represented in Semitic, Cushitic, and Omotic.

4.4.5. Pronominal stems are also at the origin of various pronominal adverbs.

REFERENCES

[1] In Cushitic, and particularly in Omotic, pronouns have often undergone considerable changes, both phonetical and structural. In some cases the independent personal pronouns seem to have originated in an archaic finite form of the *verbum substantivum*. Chadic pronouns require further study.

[2] For simplicity's sake we omit the pronouns of the dual number from further discussion. They became extinct everywhere at a very early period.

[3] Also there occurs a pronoun *s-t*, where *-t* is an element often met with in oblique cases of the pronouns in the Afrasian languages.

[4] With the verbal form *sǯm-f* (when denoting the momentary aspect in the future tense) the 'free' pronoun could also be used to emphasize the subject of the action which was already expressed by the verbal form. This phenomenon is obviously late.

[5] The same particle is frequently used to introduce the subject of the participial and verbal predicate.

[6] Under this heading comes also the expression of the logical object of the infinitives of transitive verbs, as well as the logical subject of the infinitives of intransitive verbs.

[7] This feature of Egyptian was for the first time observed by M.E.Matthieu (Matye).

[8] But, in the Egyptian verbal form *sǯm-f* the suffixed subject marker is not obligatory if this subject is expressed inside the sentence by a noun. Similarly in some Chadic languages.

[9] Many Cushitic languages have developed a new type of a prefixal conjugation that coexists with, or has ousted, the older type, on which v. infra, Chapter Five.

[10] According to R.Hetzron [Hetzron 1973/74], the original vocalization of the prefixes is that in Akkadian: *'a-, *ta-, *ǐi-(!), *ta-, *ni-, etc. In the other Semitic languages there has been some form of levelling. As I see it, the vowel, if stressed, is *-i- when the stem vowel is *-a- (*-u- in the passive), and vice versa; the unstressed vowel in the prefix is *-u- (> -ǝ-). Hetzron (p. 47) ascribes the *-u-* of the (rather late) Semitic passive (in the stem of the perfect but in the prefix of the imperfect) to the infixation of a hypothetic original passive particle. However, passive is late in Afrasian.

[11] In the Sidamo languages, if a chain of predicative words occurs, only one (the main) verbal form is built after the pattern of the typical Cushitic secondary verbal remodelling (verbal suffix as development of an auxiliary prefixed verb); the rest are treated as 'dependent', and their suffixed part is a remodelling of the Common Afrasian stative (?).

[12] In the majority of the Cushitic languages the original pronominal morph is almost impossible to pinpoint within the verbal word-form.

CHAPTER FIVE

THE VERB

5.1. There is considerable variety in the verbal structures of the
different Afrasian languages, but the major part of them is charac-
terized by the distinction, at first, between the categories of
'action' and 'state', and later, between 'transitivity' and 'intran-
sitivity'. The verbs of action also distinguish two aspects[1],
punctive (instantaneous) and durative (protracted, or continuous).
When the opposition 'action vs. state' is replaced by the opposition
'transitivity vs. intransitivity', a special predicative form of
state is no longer necessary. Aspectual forms evolve into perfective
and imperfective aspects and later on into tenses — past and present-
future. Still later, more complicated forms of tenses emerge. The
verb is conjugated for persons of the subject with the help of pro-
nominal affixes discussed above. The verbs of action (transitive
verbs as well as verbs of motion) may also have an object, expres-
sed by a pronominal suffix. In order to facilitate comparison we
will use throughout the terms 'Perfective' (*aspectus perfectivus,*
or otherwise *punctualis*) and 'Imperfective' (*aspectus imperfectivus,*
otherwise *cursivus*) for the forms of the preterite tense (or the
instantaneous aspect) and the present-future (or the continuous
aspect), in spite of the fact that in the grammars of the individual
languages other terms are mostly used. These latter terms are tradi-
tional and, as a matter of fact, mostly incorrect, e.g. "Preterite"
and "Present" in Akkadian, "Perfect" and "Imperfect" in the other
Semitic languages, "Aorist" and "Imperfect", or "Factum" and "Fiens"
in Berbero-Libyan, "Perfect" and "Present" in Cushitic, etc. Beside
that, we shall pay attention to the form of the 'Jussive' which is
used to express different modal categories (obligation, request,
possibility, etc.), as well as the 'Imperative'. In all these forms
(except the Imperative) we will use, for comparison, the form of the
3rd person singular of the subject.
    5.2. All Semitic, Cushitic and Berbero-Libyan languages posses-
sed, at a certain time in their development, a p r e f i x a l conjuga-
tion of the verbs of action, based on two different stems: One stem
was characterized by a reduced (usually i/u) vocalism, having the
pattern $*ia-(C_1)C_2VC_3-$[2], and being used for the Perfective (Punctual)
aspect as well as for the Jussive mood[3] (a similar stem but with suf-

fixes denoting person, number and gender, was used in the Imperative). Another stem — $\underset{\sim}{i}V-C_1VC_2VC_2$ in Semitic, $\underset{\sim}{i}V-C_1C_2aC_3$ in Cushitic — was used for the Imperfective (Cursive) aspect. Besides, a s u f f i x a l conjugation existed, which was used for predicates of state (Stative or "form of quality and state").[4]

The problem of the original character of the formal distinction between instantaneous (perfective) and continuous (imperfective) aspects is still controversial. Thus, M.Cohen, A.Klingenheben and others considered the aspectual oppositions as secondary, and the prefix-conjugated verbal form, *viz.* perfective, as the only primary form. In accordance with their arguments, some scholars consider the vowel of the Perfective as the root vowel. My point of view, based on the situation in the most archaic documented Afrasian languages and following O.Rössler, J.Friedrich and others, is that the apophony of the prefix-conjugated Perfective (and Jussive), and the Imperfective verbal forms was original [Diakonoff 1967]. As to the difficulty caused by the gemination of the second radical in the imperfective stem in Akkadian, I once suggested to overcome it by referring to the influence of stress. Indeed, the "normal" Akkadian stress $*'\underset{\sim}{i}V-C_1aC_2aC_3-$ would have caused the elision of the first stem vowel, so that this form would have been reduced to $*''i-C_1C_2aC_3-$, and thus would be contaminated with the perfective form of the intransitive verb $\underset{\sim}{i}i-C_1C_2aC_3- > 'i-C_1C_2aC_3$; this may have been the reason for the development: $*\underset{\sim}{i}V-'C_1aC_2aC_3 > 'i-'C_1a\bar{C}_2aC_3$.

I believed that this explanation was valid also for Cushitic (at that time I was familiar only with the forms in Beḍawye, Saho-'Afar and Sidamo in old transcriptions), as well as for Berber. The forms of the Perfective and Imperfective c o i n c i d e in the latter $(i-C_1C_2\partial C_3)$ in all triconsonantal verbs where all the consonants are "strong" (i.e. are present in the verbal form in any position), so that it becomes necessary to distinguish them by a special particle *ad* preceding the form of the Imperfective. This was caused by phenomena typical only of Berber (merging of the short vowels $*a$, $*i$, $*u$ into ∂, and reduction of one of the two neighbouring $\partial >$ zero). Therefore this situation certainly could not have been an original one. In fact, where the last radical is "weak", the difference between Perfective and Imperfective remains: Perfective $i-gmi <$ $*\underset{\sim}{i}a-gmi\underset{\sim}{i}$ 'he sought', $i-ndu < *\underset{\sim}{i}a-ndu\underset{\sim}{u}$ 'he churned' — Imperfective $i-gm\partial i < *\underset{\sim}{i}a-g(a)ma\underset{\sim}{i}$, $i-nda(\underset{\sim}{u}) < *\underset{\sim}{i}a-n(a)da\underset{\sim}{u}$. It might be possible to interpret the forms of Imperfective as developed from $*\underset{\sim}{i}a-gma\underset{\sim}{i}$, $*\underset{\sim}{i}a-nda\underset{\sim}{u}$, but in this case it would have been necessary to resolve the problem of non-differentiation between these forms and the intransitive verbs, i.e. the same problem as in Akkadian.

A.Zaborski has convincingly argued in his excellent monograph [Zaborski 1975] that in Proto-Cushitic there was an opposition of the instantaneous and the continuous aspect in the form: Perfective $*\underset{\sim}{i}a-C_1C_2iC_3$: Imperfective $\underset{\sim}{i}a-C_1C_2aC_3$. This could satisfactorily explain the Berber forms, supposing that, in Proto-Berber, there existed the forms: $*\underset{\sim}{i}a-r\underset{.}{t}ul - *\underset{\sim}{i}a-r\underset{.}{t}al$; $*\underset{\sim}{i}a-gmi\underset{\sim}{i}/\underset{\sim}{i}a-gm\bar{\imath} - *\underset{\sim}{i}a-gmai$; $*\underset{\sim}{i}a-ndu\underset{\sim}{u}/*\underset{\sim}{i}a-nd\bar{u} - *\underset{\sim}{i}a-ndau$. The objection concerning the coincidence of $-a$-forms with the verb of intransitive action can probably be

removed by the fact that such forms (as well as the later passive) had in the Imperfective the vocalization $*\textit{ǐi}/u-C_1C_2aC_3$, as is corroborated by the data of Central Semitic languages: cf. Hebrew $\textit{ǐa}$-$\textit{bō}(\text{'})$ '(he) will enter' — a verb of action, formed according to the transitive pattern, but $\textit{ǐē-bōš}$ '(he) brought shame upon himself' — according to the pattern of intransitive verbs; Ugaritic $\text{'}a\text{-}qtul$- 'I shall kill' but $\textit{'i-mhaṣ}$ 'I shall hit' (the verbs which had $ḫ$, γ, $ḥ$, ', h, ' as a second or a third radical where conjugated according to the pattern of intransitive verbs because of the change $u > a$ in the contact with these consonants). The forms of the Imperfective in Peripheral Semitic languages: i.e. Akk. $\text{'}\textit{i-}$ $C_1a\bar{C}_2VC_3$, Ethiopian $\textit{ǐə-}C_1a\bar{C}_2əC_3$, Mahrī $\textit{ǐi-}C_1\bar{o}C_2eC_3 < *\textit{ǐa-}C_1aC_2aC_3(?)$ might then be considered as secondary. However, I am still of the opinion that the full vocalism form of the Imperfective was very ancient, and that it was caused by the necessity to distinguish Imperfective and Perfective in the verb of intransitive action, because the difference of the prefixes $*\textit{ǐa-}$ and $*\textit{ǐi-}$ was lost very early in Northern and in Southern Peripheral Semitic languages, as well as, without any doubt, in Cushitic and Berbero-Libyan.

I believe that there existed a Punctual and a Cursive aspect already at the stage of Common "Semito-Cushito-Berber". The history of the development of its vocalization will become more clear to us when the historical accentuation of Afrasian languages is reconstructed. It seems quite probable, that the difference between aspects was realized at first by tonal oppositions. When dynamic accent had replaced the tonal one, it caused changes which were not the same for the whole Afrasian area.

5.3. Old Akkadian — the most archaic language of the Semitic branch — reflects that stage of the linguistic development, when the prefixal conjugation of the stem with reduced vocalism was used for the formation of the Perfective and the Jussive (it was also the stem of the Imperative), and the stem with the full vocalism $-C_1a\bar{C}_2VC$ was used for the Imperfective. Later on the function of a "Perfect" was transferred in Akkadian to one of the T-stirpes (cf. below), and the form of Perfective (but with a Subjunctive mood marker $-u$) was from that time on used only for the verbs in subordinate clauses. Besides, there was a conjugated Stative (with suffixed personal markers) expressing a state which had already occurred and is still continuing. These is every reason to reconstruct a similar situation in Old Cushitic, with the only difference that the Imperfective and the Perfective were differentiated somewhat differently.

Approximately similar is the situation in Kabyle, one of the modern Berber languages[5], with the reservation that the original vocalism of the Imperfect is not quite clear, and that the Stative was converted into a Qualitative denoting not just any state which has taken place and is continuing, but only a qualitative state ('being red', 'being cold', etc.).

In Southern Peripheral Semitic the situation is the same, but another form is used for the Perfective, $\textit{viz.}$ without conjugation by personal prefixes (in the 1st and 2nd persons it is conjugated by suffixes; they originate from the same archetype as the Akkadian Stative). The Jussive preserves the old form, and because of this

it no longer tallies with the Perfective, but has a wider distribution, approximately as the Akkadian Jussive and Subjunctive taken together.

At last, in the Central Semitic languages the Jussive preserves its old form, however not only the form of Perfective is new, but also the form of the Imperfective (namely that of the Jussive + suffix *-u*, *viz.*, it is identical with the Akkadian Subjunctive of the Perfective).

J.Kuryłowicz proposed a concept, based on certain general theoretical considerations deduced from the historical development of verbs in other languages, that the Akkadian type is the original one. In particular, J.Kuryłowicz pointed out that the Arabic and Hebrew Jussive preserved obvious traces of its former perfective semantics. These traces are the following: (a) in Hebrew, the Jussive is used instead of the Perfective after the particle *ụa-* (*ụåụ* consecutivum), and sometimes (in poetry!) also without this particle; (b) in Arabic, the Jussive has a Perfective meaning after the particle of emphatic negation *lam* (*lam ịa-qtul* 'he did by no means kill'), as well as in conditional sentences (as in Akkadian), freely alternating in this case with the New Perfective also in desiderative phrases.[6] Hence, it is possible to surmise that in Central Semitic languages the form *qatal(a)* (originally Stative) had supplanted a form of the Perfective of the pattern similar to Akkadian *'i-prus* ‖ Arabic *ịa-qtul* which had existed earlier. The origin of the form *qatal* will be discussed below.

The Southern Peripheral type originally coincided in principle with the Akkado-Berbero-Old-Cushitic one; the only difference was the use of the Central Semitic secondary Imperfective *ịa-qtul-u*.

5.4. O.Rössler [Rössler 1950] paid attention to the fact that in Mahrī (a Southern Peripheral language) only transitive verbs form Imperfective after the pattern *ịa-paras*; according to him, the same was true for the Berbero-Libyan languages.[7] The situation with intransitive verbs is different. In Mahrī, intransitive verbs form the Imperfective after the pattern *ịu/i-pras* and the Jussive is formed in the same way. Thus, the Jussive of transitive verbs tallies in Mahrī with the Old (lost) Perfective, while the Jussive of intransitive verbs tallies with the Imperfective.

O.Rössler believed, that in Central Semitic languages the form of the Imperfective of transitive verbs *ịa-prus(-u)* was adapted to the form of the Jussive *ịa-prus* because of the influence of analogy with the intransitive verb, where, according to him, the Jussive *ịu/i-pras* originally coincided with the Imperfective *ịu/i-pras(-u)*. But this explanation cannot be accepted for the following reasons: 1) transitive verbs are much more numerous than intransitive ones, and their part in the language is more important, hence the restructuring of the transitive verb after the pattern of the intransitive is not probable; 2) the primary character of the correlation of the Jussive precisely with the Perfective is probable not only because of the considerations brought forward by J.Kuryłowicz, but also because in Akkadian the Jussive of intransitive verbs of action coincides directly with the Perfective while in Mahrī the old Perfective simply does not exist (therefore, it is impossible to say whether it differed in form from the Jussive as

far as intransitive verbs are concerned); in Berber a difference in forms of the transitive and intransitive verbs cannot be proved, because a form of the Berber basic stirps transitive Imperfective *ia-parras does not exist, while the vocalism i-frəs may reflect also forms with the a vocalism of the last syllable (since in Berber ə and often also zero < *u, *i or *a).

This point of view of O.Rössler was seriously criticized by A.Klingenheben [Klingenheben 1956]. According to him, the Afrasian protolanguage possessed originally only one verbal form, but it had two pronunciations — a reduced one (*Allegro-Aussprache: *ia-pru/i/as*) and a fully vocalized (*Lento-Aussprache: ia-paru/i/as*). Originally there was no semantic distinction between these forms; later the form *ia-pru/i/as* could have acquired perfective semantics in some languages, and imperfective in others. But the suggestion that formal distinctions may precede semantic distinctions can hardly be accepted. Besides, examples from other languages demonstrate that for intransitive verbs conjugational forms devoid of aspectual opposition are not uncommon, but the distinction berween perfective and imperfective aspects (originally — Cursive and Punctual) is very archaic in the transitive verbs.[8]

It seems that none of the authors who adopted the concept of the primary origin of the Central Semitic form *ia-$C_1C_2uC_3$-u as devoid of aspectual oppositions, has noticed that this is a marked form, and because of this alone it cannot be the original one. O.Rössler as well as A.Klingenheben practically identify the forms *ia-$C_1C_2uC_3$ and *ia-$C_1C_2uC_3$-u.

5.5. I have suggested the following reconstruction of the Proto-Semitic structure of the verbal forms:

	Imperative	Perfective— — Jussive[9]	Imperfective	Aspectless verbal form in the subordinate clauses
transitive verb	*purus	*ia-prus	*ia-p(a)ras	*ia-prus-u
intransitive verb	*pVras[10]		*iV-pras	*iV-pras-u

In other words, the intransitive verbs of action, as well as all the verbs in subordinate clauses did not express aspect — a phenomenon known also in other archaic languages.

In Akkadian, a secondary Imperfective of the intransitive verbs of action was formed after the pattern 'i-parru/is by analogy with transitive verbs, and a dissection of verbal forms of the subordinate clause (Subjunctive) into aspectual categories occurred: Perfective 'i-prus-u, 'i-pras-u; Imperfective 'i-parras-u, 'i-parri/us-u.

In Southern Peripheral Semitic languages, a new Perfective of Stative origin was formed according to the pattern para/i/us(a), but the remaining forms (including the Jussive) remained intact.[11]

In Central Semitic languages also, a new Perfective of Stative origin after the pattern *para/i/us(a) was formed, but the old form of the Imperfective was here lost. The reasons for this development may be presented in the following way: the form of the Jussive *ia-prus, as well as the form of the verb of the subordinate clause *ia-prus-u were aspectless (as they still are in Mahrī), and because of that, though tallying in form with the Old Perfective, they could also express the imperfective aspect. With the emergence of the new Perfective para/i/us(a), which was used in main as well as in subordinate clauses, the form of the Jussive (with reduced vocalism, i.e. identical to the form of the Old Perfective) and the form of the verb of subordinate clauses (identical to the form of the old Perfective with reduced vocalism plus a suffix -u) became purely imperfective. Thus, alongside of modal forms with reduced vocalism, only a single asymmetrical form of the transitive verb with complete vocalism remained, viz. the Indicative Imperfective: ia-par(r)as. This form was therefore supplanted by another verbal form, next to it in frequency — *ia-prus-u. In fact, while in Akkadian the form *iV-prus-u is used only in subordinate clauses, in Arabic the form ia-qtul-u is used as imperfective in the subordinate clause as well as in the main clauses (except subordinate clauses of purpose which have a particular verbal form ia-qtul-a). In the main clause it supplanted the old form of Imperfective *ia-paras, *ia-qatal, but in subordinate clauses it simply remained in its former place. This dislodgement was made easier by the analogy with the intransitive verb of action, which possessed a form with reduced vocalism *iV-pras in the Imperfective.[12] We believe that this form, too, was aspectless by origin, but by the time in question it was supplanted in the Perfective by the new form pari/us(a).

A detailed analysis of the poorly studied verbal system of the living Ethio-Semitic languages, which has lately begun, may lead to the necessity of reconsideration of the proposed reconstruction.

As to Berbero-Libyan languages, they have departed a long way from the prototype, so that it is much more difficult to reconstruct their history, even conjecturally. It is probable, however, that they have mainly preserved the ancient structural pattern, with different changes under the influence of analogies and elisions.

The development of the Cushitic languages followed another way. The oldest stock of verbs continued to use the archaic type of conjugation. But a new type arose, collaterally with the old one. This new type was gradually ousting the old one, until it was completely lost in the Southern and a part of the Eastern and Central **Cushitic**.

A **similar** process probably took place in the Omotic languages.[13]

This new type of conjugation was derived from analytical predicative syntagms which included a deverbative nominal form and a form of the auxiliary verb (or of its participle), conjugated by means of affixes. These syntagms later merged into single lexemes, in which the relics of the auxiliary verb together with the subject pronominal affix were converted into a paradigm of new synthetic morphemes of verbal conjugation. Cf. the following examples:

	Beḍawye (Northern Cushitic)	Geleba (Eastern Cushitic)	Yämma (Omotic)
Perfective			
Sing. 1st p.	-an < *-ʼa-ʼan	-e	-i/en
2nd p. m.	-ta < *-ta-ʼan	-u-te	} -i/ete
f.	-tai < *-ta-ʼan-ī	-u-te	
3rd p. m.	-ịa < *-ịa-ʼan	-e	} -i/e
f.	-ta < *-ta-ʼan	-e	
Pl. 1st p.	-na < *-na-ʼan	} -u-te	-(a/u)ni
2nd p.	-tana < *-ta-ʼan-na		-(o)ti
3rd p.	-iana < *-ịa-ʼan-na	-e	-i/ete
Imperfective			
Sing. 1 st p.	-ani < *-ʼa-ʼani	-a	-a/una
2nd p. m.	-teni < *-ta-ʼani	-uta	-a/uta
	etc.	etc.	etc.

It is clear that in Beḍawye the new conjugation is formed from the prefixal conjugation of an auxiliary verb *ʼan 'to be', Imperfective *ʼani; cf. the "Old" conjugation of the intransitive verb *ngd: Perfective ʼa-ngad, te-ngad, etc., Imperfective ʼa-ngadi, te-ngadi, etc. It is more difficult to reconstruct the old proto-type in Yämma because of numerous simplifications and formations by analogy, but there is no doubt that the conjugation was similar in principle. It is probable, that it, too, is based on the old conjugation of an auxiliary verb ʼin, Imperfective ʼana (or *ʼani, *āna?).

A similar development took place in the Semitic Aramaic languages at the Late Stage.

5.6. We have examined the simplest situation, but actually it could be more complicated. Thus, in Akkadian there are not only transitive verbs of the usual type ʼi-prus, ʼi-parras 'to divide', but also transitive verbs of the type ʼi-pqid, ʼi-paqqid 'to charge'; *i-šdiḫ, ʼi-šaddiḫ 'to march' (a transitive verb of motion, with the object expressing place), of the type ʼi-rpud, ʼi-rappud 'to run' (over smth., with the Accusative case), and of the type ʼi-lmad, ʼi-lammad 'to learn (smth.)' as well as intransitive verbs of the type ʼi-mruṣ, ʼi-marruṣ 'to fall ill' and of the type ʼi-ḫliq, i-ḫal-liq 'to perish' (apart from an archaic type ʼi-blaṭ 'to revive'). In other Semitic languages, i.e. in Arabic, a considerable variety of forms is also attested.

In spite of considerable semantic shifts distorting the original situation, it is worth trying to classify these types.

A transitive type Akk. ʼi-prus, ʼi-parras '(he) has divided, is dividing'; Arab. ịa-nẓur(-u)[14] '(he) is keeping, taking care of' is the main type for transitive action.

A transitive type Akk. ʼi-šdiḫ, ʼi-šaddiḫ '(he) has marched, is marching', ʼi-pqid, ʼi-paqqid '(he) has charged, is charging'; Arab. ịa-ḍrib(-u) '(he) is striking' was originally, as it seems, used for verbs of motion as well as for verbs of transitory, instantaneous or superficial effect.

Language Number Person Gender		Semitic			Egyptian
		Stative	New Perfective		"Pseudo- pariciple"
		Akkadian	Gə'əz	Arabic	
Sg.	1st p.	$-\bar{a}-ku$	$-ku$	$-tu$	$-k\omega-j$ [2]
	2nd p. m. " f.	$-\bar{a}-ta$ $-\bar{a}-ti$	$-ka$ $-ki$	$-ta$ $-ti$	} $-t-j$
	3rd p. m. " f.	$-\emptyset$ [1] $-at$ [1]	$-a$ [1] $-at$ [1]	$-a$ [1] $-at$ [1]	$-w/-j$ [3] $-t-j$
Pl.	1st p.	$-\bar{a}-nu$	$-na$	$-na$	$-wjn$
	2nd p. m. " f.	$-\bar{a}-tunu$ $-\bar{a}-tina$	$-kəmu$ $-kən$	$-tumu$ $-tunna$	} $-t(j)wn-j$
	3rd p. m. " f.	$-\bar{u}$ [1] $-\bar{a}$ [1]	$-u$ [1] $-\bar{a}$ [1]	$-\bar{u}$ [1] $-na$	$-w$ [1] $-t-j$

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[1] These endings belonged originally to the m. and f. gender of the predicate (st. praedicativus, s. indeterminatus).

[2] The suffix $-j$ has defied explanation. We do not now think it is convincing that it is a relic of a prefixally conjugated auxiliary verb. Taking into account the great archaicity of Egyptian, it is improbable that it already had developed and lost a prefix conjugation of the verb at a time when in contemporaneous Akkadian the 'classical' system of prefix conjugation was still at an early stage of development. Therefore, it seems more probable that $-j$ is a predicative copula of a deictic pronominal origin.

[3] $-w$ is here the nominal m. morph, also in predicative nouns.

Table 4

Berbero-Libyan	Cushitic	Chadic
Qabyle	Sidamo	Mubi
Qualitative	Relative tenses, Perfective[8]	Suffixed form of Perfect II
$-\partial\gamma$ $(< *-akk)$	$-e$	$-na$
} $-\partial\d{d}$ $(< *-att)$	$-te$	$-ga$ $(< *-ka)$ $-ge$ $(< *-kai)$
$-\emptyset^1$ $-at^1$	$-e$ $-te$ $(< *t\emptyset)$	$-g-u^4$ $-g-i^5$
	$-ne$	$-ne$
$-it^7$	} $-tine$	} $-gun$ $(< *kun)$
	} $-ne$	} $-g-o^6$ $(< *k-\bar{a}\underaccent{}{u})$

The suffix $-j$ is of the same origin as elsewhere; in writing, either the one or the other was not spelled out.

[4] $g- < *k-$ is a determinative element, $-u$ is the ancient m. morph.

[5] $g- < *k-$ is a determinative element, $-i < *-ai$ is the ancient f. morph in nouns and pronouns ($-t$ began to be used as a feminine morph apparently at a later date).

[6] $g- < *k-$ is a determinative element in Chadic, the suffix $-\bar{a}\underaccent{}{u}$ is identical to the Egyptian $-w$ $[\mathring{a}\underaccent{}{u}]$ and is a nominal m. pl. morph alternating with $-\bar{u}$.

[7] Possibly an archaic form of the adjective plural, cf. Akkadian $-\bar{u}t-$.

[8] Possibly from an auxiliary verb + suffix.

A transitive type Akk. *'i-lmad, 'i-lammad* '(he) has learned, is learning'; Arab. *ịa-qta'(-u)* '(he) is cutting', *ịa-'lam-u* '(he) is knowing' has no clear semantic explanation; in a considerable part of the verbs of this type the vocalism is caused by phonetic positional conditions (vicinity of pharyngeal consonants, etc.), but in a certain part of the verbs this vocalic pattern cannot be explained away in this way. J.Kuryłowicz was of the opinion that this type originally included medial verbs.

Intransitive verbs express in Akkadian, strictly speaking, not a state but an intransitive action, namely a transition into a state (Ingressive): *'i-mruṣ* '(he) fell ill', *'i-marruṣ* '(he) may or must fall ill, is falling ill, will fall ill'; *'i-ḫliq* '(he) perished', *'i-ḫalliq* '(he) is perishing, will perish, may or must perish', cf. *'i-prus* '(he) has divided', *'i-parras* '(he) is dividing, will divide, may or must divide'. The state was expressed by a special predicative form of an adjective (or participle) of state. This situation may be considered as the original one. Intransitive (ingressive) verbs later acquired in Akkadian the vocalization of verbs of motion which supplanted the oldest Common Semitic vocalization of the verbs of intransitive action proper, having the pattern **ịV-pras*, archaic Akkadian *ịi-blaṭ* 'he has revived'[15]; Arab. *ịa-ḥzan(u)* 'he is grieving', Hebr. *ịi-kbad* 'he is becoming heavy', Eth. (Jussive) *ịǝ-lbas* '(he) should dress himself', Mahrī *ịi-tbōr < *ịV-čbar* 'he is breaking'.

The distribution of vocalic patterns according to semantic groups of transitive and intransitive verbs is not quite strictly observed in the majority of historically documented Semitic languages: different semantic shifts, the influence of analogy and various positional phonetic factors have caused rather early the violation of the semantic borders between the different types. So, gradually, linguistic consciousness began to disregard them, the more so, that a formal distinction between transitive and intransitive verbs had lost much of its importance in languages with a nominative verbal construction. In the Berbero-Libyan languages the vocalization patterns were obliterated by the shift $^*a$, $^*i$, $^*u >$ *ǝ*, *∅*, and by later phonetical phenomena.

5.7. Above we have already mentioned the Akkadian predicate of state, the so-called 'Permansive' or 'Stative' which had a suffixed conjugation, analogous to the Central Semitic new Perfective (the so-called "Perfect").[16] (Table 4)

It is generally accepted nowadays that the perfective usage of the form *qatal(a)* in Central and Southern Semitic languages is secondary. Not only in Akkadian, but also in other Semitic languages of the Ancient stage this form was rare and, as it seems, was originally used for predicates of state; in other words, it was quite similar not only in form, but also in semantics to Akkadian and the Old Egyptian forms of quality, and of state emerged as a result of action, i.e. to the Akkadian "Stative" and the Old Egyptian "Pseudo-Participle". The exchanging of the old Perfective (with the prefixed conjugation) for the form *qatal(a)* and correspondingly **mariĉ(a) *karum(a)* (cf. below) can, in all probability, be explained by the fact that this form, originally expressing a state as the result of an accomplished action, was inevitably perfective by its nature.

Its introduction instead of the Old Perfective allowed to distin-
guish the perfective and the imperfective aspects not only in the
verb of action (where they already did exist as punctual and cursi-
ve), but now also in the verbs of state.

In other Afrasian languages of the Semito-Cushito-Berber group
there also exist verbal forms with suffixed conjugation. These have
already been discussed above, and we shall also return to them
again below.[17]

If we now take a group of languages where the old prefixed con-
jugation is lacking, we shall see that here, too, the Stative with
the suffixed conjugation is also present: One of the Egyptian ver-
bal forms (which was already discussed above) — the so-called form
of quality, state and result of action, or, otherwise, the "Pseudo-
Participle", also erroneously called the "Old Perfect", has long
ago been compared with the Akkadian Stative, because it coincides
with it almost completely as far as semantics are concerned, and
has much in common with it in form The form of the so-called Pre-
terite II, or 'suffixal form of Perfect' in the Eastern Chadic lan-
guage Mubi probably also belongs here.

All these typical Afrasian forms are predicates of state, or
statives by their origin. They have a uniform conjugation by means
of the suffixation of the short form of the personal pronoun in
the direct case to a nominal stem, especially, as it seems, to the
stem of the participle of state (verbal adjective).

In fact, the Akkadian Stative can only with some caution be
regarded as a verbal form proper. Like the Kabyle Qualitative and
the Egyptian form of quality and state, or "Pseudo-Participle", it
is, by origin, a nominal form, usually a form of the verbal adject-
ive. In the case presented below, it is the form of the participle
of state $C_1aC_2(i)C_3-u-m$, in the *status praedicativus* (and thus,
without case inflexion): $C_1aC_2iC_3$.[18] In the 1st and 2nd persons a
short form of the independent personal pronoun in the direct (abso-
lute) case is attached to it, and in the 3rd person feminine, the
nominal marker of this gender. Despite the fact that the "conjugat-
ed" form of the participle of state is especially frequent in the
role of nominal predicate (simply because the participle of state
is a paradigmatic nominal form obligatory for any verb) actually
any noun may in Akkadian in principle be conjugated in a similar
manner, e.g. the participle of action: *pāris-āku, pāris-āta, pāris-
āti, pāris, pāris-at* 'I am (the) divider', etc.; *mu-ša-pris-āku,
mu-ša-pris-āta, mu-ša-pris-āti, mu-ša-pris, mu-ša-pris-at* 'I am
the one who makes divide', etc., — and even any substantive: *šarr-
āku, šarr-āta, šarr-āti, šar, šarr-at* 'I am king', etc. Certainly,
the latter forms are attested mainly at the latest stages of the
development of Akkadian, but this only proves that even in Neo-Ak-
kadian the Stative was still perceived as a nominal and not a verb-
al form.

It should be noted that the participle of state may in Akkadian
have three different vocalic patterns: *ṣabit* 'taken; having taken
and keeping'; *maruṣ* 'ill, fallen ill' and *ḫalaq* 'perished'. The
participle of state is not the same as a passive participle; this
is demonstrated by the *ṣabit* example.

Since it was not confined to passive semantics, this is why it could have served as prototype of the "New" Central and Southern Semitic Perfective (the "Perfect"), which also possessed three patterns, viz. a pattern *qatal(a)* 'has killed' for transitive verbs; a pattern *mariĉ(a)* 'ill, has been ill' and a pattern *karum(a)* '(was) generous'[19] for intransitive verbs. There is a complete analogy for this final *-a* in the short *-a* of the Old Akkadian and Amorite nominal forms in *status praedicativus (indeterminatus)*.[20] In our opinion, the predicative expression of the category of state (which is to be distinguished from the intransitive action, i.e., from the Ingressive) was nominal also in Common Afrasian. When later on the Stative was transformed into a general Perfective, the verbal predicate in the Perfective was, accordingly, supplanted by a form of an originally nominal predicate (the predicate form of the participle of state). This is a phenomenon widely known in the history of different language families; for instance, the history of the Indo-European Perfect — also a Stative by its origin — is quite similar.

Doubts have been expressed about the reality of a Common Afrasian origin of the Stative. But despite the fact that it is attested only in a few individual languages, note that these languages belong to all branches of the Afrasian language family (cf. table 4).

5.8. In Egyptian, all "conjugated" forms, except the "Pseudo-Participle" (Stative) consist of a verbal stem (probably a verbal noun, e.g. a participle or a name of action) and a pronoun, which is attached to the verb either directly or with the help of particles and auxiliary words (prepositions). Only in the "form of quality and state" ("Pseudo-Participle") may the subject markers be considered actual verbal affixes, but we have already seen that the nominal origin of this form is also quite probable. The verbal form of the "Pseudo-Participle" originated from a shortened nominal sentence ('I [am] hearing') or from an appositive construction (noun plus participle) 'hearing, I', which is genetically the same thing. Therefore, only here the subject markers arise from pronouns of the direct case. In all the other ancient Egyptian verbal forms the subject markers are not verbal affixes in the proper sense but possessive pronouns, i.e., from the historical point of view, we have here an attributive ('my hearing') or adverbial ('hearing for me') construction. Therefore, if the subject of action is expressed in a sentence by a noun, and not by a pronoun, no special subject marker is attached to the predicate at all: *sǯm-j* 'I hear'; *sǯm-k* 'you (masc. sing.) hear'; *sǯm-č* 'you (fem. sing.) hear'; *sǯm-f* 'he hears'; *sǯm-s* 'she hears', i.e. exactly in the same way as in: *pr-j* 'my house', *pr-k* 'your (masc. sing.) house', *pr-č* 'your (fem. sing.) nouse', *pr-f* 'his house', *pr-s* 'her house'. But *sǯm zꜣ-j* 'hear(s) son-my'. Both *sǯm-f* and *sǯm zꜣ-j* are the same attributive construction.[21] As we have already pointed out earlier, it may be inferred from all this, that if a subject of quality or state resulting from an action expressed by a "Pseudo-Participle" is in the direct case, then the subject of action must be in an oblique (genitive) case.

Other "conjugated" verbal forms of Old Egyptian are formed after the pattern *sǯm-f*, i.e. as pseudo-attributive or pseudo-prepositional constructions: *sǯm-n-f*, *sǯm-ỉn-f*, *sǯm-ḫr-f*, *sǯm-kꜣ-f* etc.

According to W.Westendorf, the author of an excellent study of the Old Egyptian verb, the passive participle in the role of the predicate of a nominal sentence was used as the prototype for the verbal forms *sḏm-f; mr sn* 'beloved (is) brother'. In this construction the logical subject is expressed by an attribute of the predicate in the form of the genitive case (i.e. in possessive form): *mr it sn* 'beloved (of) father (is) son'; *mr-f sn* 'beloved-his (is) brother'. This form was neutral as to aspect oppositions, but apart from it there was also a durative participle of the type *mrr*.[22] But in spelling (and probably, partially also in the actual language) it was not always possible to differentiate between these two forms. Because of this, or by some other reasons, another construction emerged in Old Egyptian, viz. *mr-n-f* 'beloved for him'. This construction acquired a perfective semantic, i.e. it became the form of the Perfective aspect. It was followed by the assignement of the semantics of the Imperfective aspect to the form *mr-f*, and of the duration or frequency of action to the form *mrr-f*.

According to W.Westendorf, originally the Perfective was expressed by the "Pseudo-Participle" for the transitive and intransitive verbs alike, and the Imperfective was expressed by a prefixal conjugation of the type of the Akkadian *'i-prus*. Later on the form *sḏm-n-f* supplanted the "Pseudo-Participle" in transitive verbs, and the form *sḏm-f* supplanted it in the prefixal conjugation. Then, at last, these forms supplanted both the "Pseudo-Participle", and the Imperfective with the prefixal conjugation, in intransitive verbs also.

It is not possible to accept this reconstruction. It is scarcely probable that the "Pseudo-Participle" could have ever expressed the perfect aspect of transitive verbs at so early a period, taking into consideration its nature and origin [Osing 1976].[23] The transformation of the form expressing quality and state resulting from an action, into a form of the perfect aspect is theoretically possible, and is attested in actual languages. But it is difficult to imagine that a form which already began to express the perfective aspect everywhere, would lose this function and return to the denotation only of the state resulting from an action. Besides, as it was demonstrated above, this form appears in Afrasian languages as a Perfective (and not as a Stative) rather late, and only in one group of Central Semitic languages.

It should be added that one may doubt that a single pattern, viz. that of a "passive" participle, could be always used as the basis for the formation of verbal forms of the *sḏm-f* type. Namely, there is reason to believe, that the finite verbal form could have been based on variously vocalized forms of the verbal noun: cf. Afrasian *ḥmm, *ḥsb > Eg. ḥmm (with palatalization, i.e. [*ḥimim-?]), but ḥsb (without palatalization, therefore with another vocalism, i.e. [ḥasab-]). Cf. below on the supposed Common Afrasian "Passive".

It is more probable, that there never was any form with prefixal conjugation in Egyptian, and that, in accordance with the possessive construction which obtained there, the conjugated forms of the verb of action arose directly from a preverbal stage (or, in any case, before a prefixal conjugation had emerged) in the form of nominal attributive and prepositional constructions, i.e. *sḏm-f, sḏm-n-f*, etc.

5.9. The Chadic verbal system is yet enigmatic in many points. It is probably too early to theorize on the Central and Eastern Chadic verb, so we shall here limit ourselves to discussion of some features of the Western Chadic verb. In principle, the verbal form consists, as a rule, of three more or less independent elements (at the end of the last, also different suffixes are possible), e.g. Hausa *kira*; 3rd person sing. Jussive *ịa-∅ kira* 'let him call'; Perfective *ịa(-n) kira* 'he has called'; Imperfective *ịa-na kira-ụa* 'he is calling'. It would be natural to think, that the first two elements constitute a prefixally conjugated auxiliary verb, and the third, a nominal (deverbative) stem; the more so because subject pronouns seem to be very much similar to the Semito-Cushito-Berber pronominal markers of the subject of action in the verbal conjugation (cf. table 1): 1st p. *∅-* (or *'a-/'ị-*), 2nd p. masc. *ka-*, fem. *kị-*, 3rd p. masc. *ịa-*, fem. *ta-*; 1st p. pl. *mu-*, 2nd p. *ku-*, 3rd p. *su-*. In those cases when the marker *-∅/-n/-na* was substituted by another one, i.e. *ka*, etc. (these are markers of different tense, aspect and modal forms), it seemed possible to explain away this element as originating in some verb playing an auxiliary role.

However, P.Newman and R.Schuh [Newman-Schuh 1974] have recently demonstrated that only in Hausa is the 3rd person singular of the first element of the verbal form actually similar to the Semito-Cushito-Berber personal marker of the subject of action *ịa-*. In the other Chadic languages other pronouns are attested here (e.g., *su*; *ši < si*), and in certain cases the whole paradigm of personal verbal markers coincides with the possessive pronoun of the 3rd p. masc. singular. As to the second element, it coincides either with a *nota genitivi* (a pronoun *-n*, *-na* introducing an attribute), or with a preposition (*ka*, etc.). Thus, the whole Chadic verbal construction may be considered as an exact copy of the Egyptian *sẖm-f*, *sẖm-n-f*, *sẖm-k;-f*[24], etc. (up to the absence of a verbal pronominal marker in cases when the noun expressing the subject of action is present in the sentence). The only difference is that in Chadic this construction has an inverse order of elements, correlating with the usual Chadic word order, which is inverted as compared to the Egyptian and Semitic one. The hypothesis of P.Newman and R.Schuh is of great importance for the reconstruction of the history of Afrasian languages, but it needs further elaboration and checking, because in the Chadic branch, taken as a whole, there are few evident coincidences of personal markers of the verb with a paradigm of possessive pronouns or any other pronominal set.

5.10. A specific type of verbal inflection is presented in Southern Cushitic languages and in an Eastern Cushitic language, Somali. Here the function of denotation of the relations between predicate and the other parts of the sentence, including the subject, is performed by a special lexico-grammatical unit, attached to the verbal predicate, namely a 'selector', or otherwise, an 'indicator'. In a certain sense, the indicator corresponds to the first two elements of the Chadic verbal form (expressing person, number and gender of the subject, as well as the aspect, etc.). All this is expressed in the indicator in a synthetic form. Just as the first element of the Chadic verbal form, the indicator is obviously of a pronominal origin. The various grammatical categories are

expressed in the indicator by vowels, but in the first place by tonal oppositions. In Southern Cushitic and Somali the indicators arise from elements of a verbal form of the Chadic type. This means that the Chadic type of the predicative arrangement is very archaic, and that, if so, it was not limited to the Egyptian-Chadic subfamily (superfamily) alone. However, if in the latter subfamily a real prefixal conjugation never emerged, such is not the case in Somali: here the prefixal verbal conjugation does exist, *viz.*, in auxiliary verbs. But in the Southern Cushitic languages there in no prefixal conjugation, nor even any trace of it. So is it possible that the spread of indicators to Somali from Southern Cushitic is an areal phenomenon, and that Southern Cushitic does not belong to the SCB group at all? The Southern Cushitic languages have many archaic features also in phonology and, in general, they seem quite archaic, and need further close comparative study.

It is evident that specifically the genetic connections of Southern Cushitic languages need a more thorough elaboration.

5.11. P a s s i v e. It has been presumed that a well-developed system of Passive existed in Egyptian. The system of Passive pervades the whole system of Arabic where every participle or conjugated verbal form possesses an active and a passive variant.[25] An almost similar situation obtains in Hebrew and Old Aramaic. But in other Afrasian languages the situation is more complex. In the majority of Afrasian languages, namely in Cushitic, in Berber, as well as in such Semitic languages as Ethiopian, Akkadian and in the later Aramaic dialects, passive semantics can be connoted by reflexive verbal forms as a secondary development. In certain Eastern Cushitic languages an ergative sentence construction prevails (opposition 'action vs. state'), and this precludes the existence of a veritable Passive, because there is no possibility to express the verbal action from the point of view of its logical object, and the very notion of direct object is foreign to the ergative grammatical structure.

In order to establish whether or not Passive was originally lacking in Afrasian languages, it is useful to turn to Egyptian as the oldest language where the existence of a well-developed Passive is postulated.

W.Westendorf, the author of a monograph wholly devoted to Passive [Westendorf, 1953], writes: "In Egyptian ... the opposition 'Active—Passive' at least in the period of the emergence of the suffixal conjugation was by no means what is usually understood under the opposition of the 'active voice' versus 'passive voice'. The Passive here is never used for the expression of the logical object as a grammatical subject; the difference between Active and Passive of a single verbal form consists only in the fact, that in one case the acting person (logical subject) is explicitly mentioned, and in the other it is not. Thus, there is no specific forms with different vocalism, and in syntax the subject and the object do not change places, as, e.g. they do in the sentences: 'The father loves the brother' and 'The brother is loved by the father'. Whether a form is to be regarded as 'active' or 'passive' depends solely on whether the acting person is explicitly denoted or not. But even when it is, it plays but a secondary role, because it is

included, in the Genitive, into a binominal sentence, consisting of
a passive participle (as a predicate) and the logical object (as a
grammatical subject). The use of Passive was originally not a styli-
stic category: it was not possible to choose arbitrarily either the
construction 'he loves the brother' or 'the brother is loved by
him' in order to emphasize a particular part of the sentence. The
choice of constructions is prescribed by the presence or absence
of the acting person; thus, the Passive originally performs a gram-
matical function similar to that of the Passive in Classical Arabic,
where it may be used only in the case when a person who performs
the action has by some reason to be passed over in silence". [Idem.,
p. 7].

The analogy with Arabic is not quite appropriate here, since in
Arabic the Passive is a separate verbal form with specific vocalism;
while in Egyptian, the Passive originally is not a specific form,
but a specific usage of the same form which is also used in the
Active, namely when it is used impersonally. The stem of the Egyp-
tian 'verbal' predicate is by no means a passive participle, but
either a participle of state, or, perhaps, as we pointed out above,
a name of action (*masdar*). Thus, if we leave aside constructions
with participles and the later types of Passive, originating in
impersonal and reflexive forms, it is possible to state, that ori-
ginally Egyptian lacked a Passive voice as opposed to the Active
and expressing the point of view of the object by considering the
object as a grammatical subject. But Egyptian possessed a form
expressing a state, viz. the Stative. Thus we may consider Semitic
Passive as a Central Semitic innovation. Note that it is absent
from archaic peripheral languages — Akkadian and Ethiopian.[26]

Among other Afrasian languages something like a Passive does
exist, e.g., in Hausa (–*u*–vocalization of the last syllable of the
verbal stem). But neither this form does completely correspond to
the definition of Passive: it also expresses the p o s s i b i l i t y
of producing an action: *ịa ḍafu* 'it can be cooked, it is cookable'.
This meaning is probably the original one when compared to the
meaning 'it is cooked'. It can by now be no doubt that this form is
a Stative and not a Passive. Thus, even in those Afrasian languages
where a "Passive" is present, it is originally a form of expression
for impersonal action, and is not opposed to the Active as a form in
which the logical object is expressed as the grammatical subject.

The identity of the formation of Stative in Hausa and the "Pas-
sive" in Egyptian (*sẖm-w*) which are also similar to the form of
the Hausa name of action in –*ụa*, has been pointed out in the liter-
ature. In the Semitic languages the participle of state and the
deverbative nouns close to it in semantics have a marker $-\bar{u}-/-u-$
(or $-\bar{\iota}-/-i-$), but it is already infixed into the stem: Hebr. *qåṭūl*,
Aram. *qəṭūl* and more often *qəṭīl* 'killed', Arab. *maqtūl-* 'killed',
Eth. *qəddūs* 'sanctified' (D-stem), Akk. *parīs-* 'divided' (cf. *paris*
Stative!), but cf. also Akk. *karūb-* 'blessed', etc.; a similar situ-
ation obtains in the conjugated forms of the Passive: Hebrew *qut-
ṭal* (D-stem), Aram. *qəṭīl*, Arab. *qutila* 'killed'. The variation in
the vocalism is by itself indicative of the secondary development
of conjugated Passive forms. The Passive Imperfective is formed by
the prefix *ịu*– instead of *ịa*– of the Active voice. Probably this

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form arose originally in intransitive verbs, where it was later supplanted by the form of the prefix of the active transitive **Imper-**fective, as, e.g., in Arabic. In general, Arabic Passive Imperfective *ĭu-qtal-u* is probably in its form and origin nothing but an archaic form of the intransitive Ingressive. The Hebrew Passive Imperfective of the D-stem *ĭə-quttal* < *ĭu-quttal* has certainly its origin in *ĭu-qattal* and is formed by analogy with *ĭu-qtal*. In Egyptian, a secondary Passive was formed on the base of the form with the impersonal pronoun *tw: tw sǯm-f* 'someone hears'; *sǯm-tw-f* 'he is heard (by someone)'. In Berber (according to A.Klingenheben) *tĭu* was used as an affix of derivative reflexive-passive stems (stirpes), and is included into the verbal form: *i-tĭu-zra* 'is seen'; *i-tĭu-zri* 'can be seen'. Of course, this form is in no way related to the Akkadian "Perfect", which originally expressed a sequence of actions (*'i-p-ta-ras* < *prs*, cf. below), but later displaced the old Perfective relegating it to the Subjunctive mood, so that it remained only in subordinate, interrogative and negative clauses.

Above we have already pointed out the following: (1) The Nominative case was used only in order to express a subject of the verb, but not for simple nomination of a person or a thing. (2) The Semitic accusative case probably arose from the absolute case of the subject of a state (they partially coincided in the oldest form of Old Akkadian and in Amorite, and are not distinguished in certain Cushitic languages; they probably were not distinguished in Proto-Cushitic, either). (3) In some Cushitic and Omotic languages there is still a distinction between a "Nominative" (actually Ergative) case in *-i/u*, and an absolute zero case used also for the direct object of action (= subject of the state resulting from an action). (4) In verbs, the pronominal marker of the subject of action (and only later also of the subject of state, which originally was not expressed by any verbal predicate) originated from pronouns in an oblique case, and not from direct case pronouns. (5) In Egyptian the verbal 'form of quality and state' belonged to a construction with the direct case, but the verbs of action — to a possessive, not nominative construction (i.e., a construction which demands a subject in the oblique case, in this particular instance, in the genitive case). (6) Intransitive ingressive verbs were probably aspectless; the category of state was originally expressed by nominal predicates only. (7) The verbs of action actually had a 'bilateral" concord both with the subject of action (via the subject pronominal elements of the verb), and with the subject of the state resulting from this action, i.e. with the direct object, via suffixed pronominal elements. Now we may also add to this: (8) Originally the Afrasian languages did not have an opposition of active and passive voices, the Passive emerging later, originating in impersonal and reflexive forms.

All this almost certainly means that the Afrasian languages originally had an ergative construction of the sentence, which is still preserved in some Cushitic and Chadic languages.

As it was said above, the object of the transitive verbs is expressed in the majority of Afrasian languages by suffixal pronominal markers. Nevertheless, Semitic conjugation usually is not interpreted as bilateral (subject-object). This is because, first,

the pronominal object markers do not differ materially from posses-
sive suffixal and even independent pronouns; second, any transitive
verbal form can be used also without an object marker. In the Semit-
ic construction of the nominative type, the direct object is no
longer a subject of the state resulting from an action, on a par
with the subject of action. Therefore, in Semitic languages the
object marker is attached to transitive verbs in a different way
from what is usual in the ergative languages: if the object is
named in the sentence, it is not, as a rule, marked by a pronominal
marker attaching to the verb; such a marker is used exclusively if
it is the only denotation of the object in a sentence. The excep-
tions are rare. But the possibility to mark not only a subject, but
also an object of action (sometimes even an oblique object) by a
special marker attached to the verbal form is another feature which
connects Afrasian languages with their sentence structure of a, gener-
ally speaking, nominative type, with ergative languages.

5.12. The m o o d s were expressed in Ancient Semitic languages
by external vocalic inflexion. Therefore, with the loss of such
inflexion at the Middle Stage, the moods either disappeared complet-
ely, or were preserved as relics only.

The modal system is well preserved in Classical Arabic and in
Akkadian. We shall not consider the Imperative here, because it is,
as in other languages, a specific independent conjugated form not
on a par with the other moods. Here we shall consider as modal only
forms which modify the character of the action expressed by princip-
al (aspectual) forms.

In Arabic, first of all, there is the Jussive (ia-$qtul$), used
to express wishes, prohibitions, emphatic negation, and is also
used in conditional clauses (li-na-$qtul$ 'let us kill'; $l\bar{a}$ ta-$qtul$
'don't kill'; lam 'a-$qtul$ 'I have by no means killed'; 'in ia-$qtul$
'if he kills/killed').

In Akkadian grammars there is attested a Precative form (l-i-
$prus$) 'let him divide' < *$l(V)$ + 'i-$prus$, where $l(V)$ is originally
an asseverative particle, and a Vetitive ('$ai(-')i$-$prus$ 'let him
not divide')[27], as well as the usage of the Perfective ("Preterite")
in conditional clauses. Of course, the Akkadian Perfective coinci-
des in form with the Arabic Jussive. Therefore, we may assert that
Akkadian also possesses a Jussive of the pattern 'i-$prus$ (coinci-
ding with the Perfective — possibly distinguished by stress or tone).
It is used in its pure form in conditional clauses ($\check{s}um$-ma 'i-$prus$ <
*$\check{s}im/n$-ma iV-$prus$ 'if he divides'; cf. Arab. 'in ia-$qtul$ < *$\check{s}in/m$
ia-$qtul$ 'if he kills') and, with appropriate particles, in order
to express a positive wish ($l(V)$-i-$prus$, cf. Arab. li-na-$qtul$), and
a negative wish ('ai-i-$prus$).

The Subjunctive in Arabic (suffix $-a$) and in Akkadian (suffix
$-u$) are entirely different phenomena.

In Arabic the Subjunctive is not used in all subordinate claus-
es, but only in intentional ones, with appropriate modal particles
(subordinate conjunctions): $\check{g}alasa$ $likai$ ia-$ktub$-a $makt\bar{u}b$-a-n 'he
sat down in order to write (= that he write) a letter', 'u-rid-u
'an 'a-$\check{s}rab$-a 'I am thirsty', lit. 'I want that I drink'. In all
probability, this marker $-a$ originates in the nominal marker of the

object $-a$ (accusative-locative). In other subordinate clauses the usual imperfective form in $-u$ is used also in Arabic.

The Akkadian Subjunctive is a form of any verb of a subordinate clause (except conditional clauses). It probably originated (as is usual in ancient ergative languages) from a form of nominalization of the finite verb in subordinate clauses by a case marker: a phenomenon amply attested in Cushitic languages. In Akkadian it is probably a locative case marker $-u$ ($<$ *$un?$).

The Semitic modal markers were originally case markers expressing an attribute, a complement, an object, or a locative or temporal circumstance, transferred to the verbal predicate in attributive, complemental etc. subordinate clauses. This has, for the first time in European scholarship, been demonstrated by A.P.Riftin [Riftin 1941]. But this phenomenon is much more evident in Cushitic languages, especially in Central Cushitic (Agaw), partially in Eastern Cushitic. Here, the fact that a subordinate clause performs the function of a certain part of the main clause (as above), is expressed by the attachment to the clause of a respective case-marker referring to the subordinate clause's syntactic function in respect to the main clause. In some languages, relative markers added to subordinate clauses completely coincide with the nominal declension, in other languages — only partially, but this is a problem of the history of each individual language, and does not influence the theoretical interpretation of this structure.

In Egyptian, a marker of feminine gender is attached to the verbal stem (p r e c e d i n g the corresponding pronominal possessive marker expressing the subject), if the verb of the subordinate clause depends on a feminine noun (as mentioned above, the verbal stem in question is often a participle by origin). Thus, in the Indicative $s\check{g}m-f$ 'he hears' structurally means '(the one) hearing (m.) of him' or '(the one) hearing-his', but in the Subjunctive $\hbar m-t$ $s\check{g}m-t-f$ 'the woman whom he hears' is lit. 'the woman (the one) hearing (f.) his'. Here we have a complete identity of the verbal and the nominal construction. The situation with the feminine gender of the determinatum in those Cushitic languages, where the nominalization of the conjugated verbal form of the subordinate clause is attested, is somewhat different. Here the subordinate clause is considered as an attribute-adjective, and if it is dependent on a word of feminine gender in the main clause, the feminine nominal marker $-t$ is adjoined to the whole clause.

Thus, of the Semitic moods known to us, the Jussive was originally a special application of the Old Perfective. The Akkadian and Ethiopian Subjunctive (and the New Central Semitic Imperfective, originating from it) seems to be the result of a nominalization of the conjugated verbal form by its declension in a subordinate clause — a phenomenon well known to us in the ancient ergative languages. As to the Arabic Subjunctive in $-a$, for intentional clauses, it is a form parallel with the locative object marker $-a$. (Let me remind the reader that with verbs of motion the locative is expressed by the accusative in $-a$.) In other words, it is evident that there were no moods in Proto-Afrasian, but only nominal cases (or, otherwise, postpositive markers, which is, in principle, the same) which were attached to nouns as well as to phrases and to comple-

mentary, attributive and adverbial subordinate clauses, depending on their functions as parts of the main clause. This situation is still attested in Agaw and some other languages.

5.13. On the grounds of what was said above it can be seen that the Afrasian verb did not, as is the case in many other language families, accumulate specific markers of locative[28] or modal characterization of the action.

Afrasian word-formation practically lacks, at least in the historically documented period, such means of widening lexical semantics of verbal roots as word-compounding[29] (except reduplication), or various prefixes of a prepositional origin, indicating the direction of action, etc.

But another means of widening the semantic possibilities was evolved in the Afrasian verb. It is usually called, in the Western schools of Semitology, "verbal stems", or "modifications". The term "verbal stem" is unfortunate, because what is meant is not a single stem, but a paradigm. In the Russian linguistic tradition the term *poróda* is used, a translation of the Latin *stirps* which was *nau'* formerly widely used in the European grammars of Semitic languages as a rendering of the traditional Arabic grammatical term *nau'*.

The s t i r p e s are derivative lexico-grammatical formations modifying original verbal semantics of action or state as to its qualitative, quantitative or directional characteristics. Partially they correspond to voices (causative, medial, reflexive), but they do not include the principal voices: Active and Passive: the two latter are either lacking entirely in the Afrasian languages, or are present as secondary forms in the framework of the paradigm of any stirps.

Each stirps evolves a full paradigm of verbal forms, parallel to the paradigm of the primary verbal form (stirps): Perfective, Imperfective, name or names of action (*masdars*, infinitives), participles of action and state (later — active and passive participles), etc.

The principal means of stirps derivation in Afrasian languages are: 1) reduplication (gemination) of the whole root or of its part (stirpes of the D-type); 2) affixation of the markers: *š-* (stirpes of the Š-type), *m-/n-* (stirpes of the M-/N-type), and *t-* (stirpes of the T-type). In the stirps-formation, the vocalization patterns of the different paradigmatic forms are different from those of the principal G stirps.[30] Still other stirpes do exist, as e.g. such that are formed by means of a special structure of vocalization (infixation), viz. by infixation of *-ai̯-*, *-au̯-*, *-ā-* (stirpes of the A-type) as well as stirpes combining two or more types (Š+T, T+N, Š+D, D+T, etc.).

The semantics of the individual stirpes may vary in the different languages and groups of languages. But it is possible to mark out certain main semantic patterns inherent in the different types of the stirpes.

The stirpes of the D-type (reduplicated) usually denote an action as either intensive, or iterative, factitive, declarative or causative. Reduplication is widely used (in connection with the factitive semantics of this stirps) for the derivation of denominative verbs. In Semitic languages the stirpes based on full and even

partial reduplication of the stem are infrequent (but they are char-
acteristic of Cushitic, partly of Berber and Chadic languages);
instead, a stirps with a reduction of the stem reduplication to a
gemination (or rather lengthening) only of the second (sometimes
the third) radical consonant is widely used. Forms with this or sim-
ilar "reduced" reduplication are used in Egyptian and Berber for
expressing a third aspect (alongside of Punctual and Cursive) —
namely Habitative, and are included into the paradigm of any stirps,
including the primary one.

Stïrpes of the Š-type denote the action mostly as causative
(incitement to action), sometimes as factitive (action causing a
state) and declarative. In Somali, Hausa, etc. the affix $*\check{s}$- is
present in the form of a suffix $-s$.

Stirpes of the N-/M-type have reflexive (and reciprocal) sem-
antics; later they evolve in the direction of Passive. In Old
Egyptian n- is attested almost exclusively as a means of lengthen-
ing biconsonantal roots (thus sometimes also in Semitic). In Ber-
ber and Cushitic the stirpes of the M-type are commonly used
instead of the stirpes of the N-type, i.e. as reflexive and reciproc-
al stirpes (in the Semitic languages the marker mV- is widely used
only in the formation of verbal nouns, but not finite verbal forms).

Stirpes of the T-type (with the prefixation, later also quite
often infixation, and in Cushitic, Berber and Chadic also suffixa-
tion of the marker $-t$-) originally denotated, as it seems, changes
in the direction of action, and this was the basis for the develop-
ment of reflexive and reciprocal semantics.[31] In Aramaic, the wide-
ly spread stirpes of the T-type gradually acquire passive semantics.
In Akkadian an aspectual form — the so-called "Perfect" — is evolv-
ed on the base of the verbal form with the infix $-t$-. At first it
expressed sequence of actions, and later this form supplanted the
form of the old Perfective in the Indicative. In Egyptian only some
relics of stirpes of the T-type are attested; but in Berber, verbal
forms with the affix $-t$- play a very important role. It seems that
habitative forms (denoting usual or constant actions) and passive
forms evolve here on the basis of the same original sequential
denotation. The generally intransitive semantics of the T-forms
induced the formation of a secondary Imperfective of the intransitive
verbs. In the Cushitic languages, forms of the T-type often have re-
flexive semantics, which later evolve into a general intransitive
voice and into a passive.

The stirpes of the A-type are less widely spread. These stirpes
were perhaps originally used as conative (indicating purpose), but
later they were used with other connotations. They are typical of
Berbero-Libyan and Southern Semitic languages, rare in North-Centr-
al Semitic, and are completely absent in Akkadian. In Cushitic lan-
guages they have a tendency to supplant the stirpes of the D-type.

Various means of stirps-formation may combine; in particular,
the T-type is often combined with the D- and Š-types in order to
denote a reflexive of the iterative, causative etc. connotation.[32]

It is worth noting that languages using those types of
conjugated verbal forms, which evolved later, often still
preserve the stirpes affixes, at least some of them, but these
affixes are suffixed, not prefixed as before (Cushitic verbs of

the new conjugational patterns, Chadic and partially Berber verbs).
Some traces of suffixation of the stirps markers may be found also
in the Semitic languages, as well as in Egyptian.

All stirps prefixes have pronominal (deictic) origin.

The origin of the aspectual and other forms in the framework
of the derivative stirpes paradigms, as well as of their vocaliza-
tion patterns, is even less studied than the same problem for the
main stirps (G).

Derivative stirpes do not possess specific inflexional markers
of transitivity and intransitivity (similar to the differences in
vocalization of the primary stirps forms 'i-$prus$, 'i-$šdiḥ$, 'i-$mruṣ$,
'i-$lmad$, cf. above). This stands probably in connection with the
fact that originally certain of the stirpes were always transitive,
and the others, on the contrary, were always intransitive. The Per-
fective and the Imperfective were originally formed from the pat-
terns $-p(a)ris$ and $-p(a)ras$ respectively; the New Central Semitic
Perfective of denominal origin is everywhere formed from the pat-
terns $p(a)ras(\dot{a})/q(a)tal(a)$.

We have seen above that the personal subject verbal marker had
possibly two vocalization patterns: ia- for transitive and iu/i-
for intransitive verbs. Contrary to this rule, in the majority of
Semitic languages the D-, Š- and A-stirpes (usually transitive)
have the iu- vocalization, and reflexive stirpes, the ia- pattern
(in Akkadian 'u- and 'i- correspondingly). The personal marker of
the passive conjugation is vocalized as $*iu$-.[33]

The original paradigm of derivative stems (at least in Proto-
Semitic) was as follows:

	Perfective–Jussive	Imperfective
D	$*iu$-$parris^a$	$*iu$-$parras^a$
S	$*iu$-$ša$-$p(a)ris$	$*iu$-$ša$-$p(a)ras$
N	$*ia$-n-$paris$	$*ia$-n-$paras$
T	$*ia$-t-$paris^b$	$*ia$-t-$paras^b$

Notes: a. The gemination of the second radical in stems of the
D-stirps $-parris$, $-parras$ is of an origin different from the gemina-
tion in the Imperfective form 'i-$parras$ of the Akkadian G-stirps,
and, by analogy, of the Imperfective of the N- and T-stirpes: $*ia$-n-
$parras > *ipparras$; $*ia$-p-ta-$ras > $'$ip$-$ta$-$rras$. In the D-stem the
gemination results from a reduction of the reduplication $*$-$paras$-
$paras$-, in the G-stem it is probably the result of an accent pat-
tern: $*'$-$paras > -parras$. There is a great diversity among the
D-type stirpes, cf. Arabic ia-$qtall$-, Berbero-Libyan i-$fərurəs$, etc.

b. In the T-stirps a metathesis with the infixation of $-t$- is
possible: $*ia$-p-ta-ris, $*ia$-p-$ta(r)ras$ (but cf. also note 31).

In Semitic languages, excepting Akkadian, the new Perfective
with the stem $*p(a)rasa — *q(a)tala$ has in the derivative stirpes
supplanted the old one, and the Perfective with the suffix $-u$
(Subjunctive mood) has supplanted the old Imperfective. The reasons
were the same as in the basic stirps. (However, in some languages,
as e.g. in Arabic, the $-a$- vocalization is preserved in the D+T
stirpes):

	Perfective	Imperfective

	Perfective	Imperfective
D	*qattala	*$\underset{\smile}{i}$u-qattil-u
S	*ša-q(a)tala	*$\underset{\smile}{i}$u-ša-q(a)til-u
N	*na-q(a)tala ⎫ *(i)n-qatala ⎭	*$\underset{\smile}{i}$a-n-qatil-u
T	*ta-qatala ⎫ *(h)it-qatala ⎭	{ *$\underset{\smile}{i}$a-ta-qatil-u { *$\underset{\smile}{i}$a-t-qatil-u
T+D	*ta-qattala ⎫ *(h)i(t)-qattala ⎭	{ *$\underset{\smile}{i}$a-ta-qattilu { *$\underset{\smile}{i}$a-t-qattal-u, and so forth.

Note. The T-stirps, as a result of metathesis and infixation of −t−, develops the forms: *(i)q-ta-tala, $\underset{\smile}{i}$a-q-ta-til-u.

The stirpes in the other Afrasian languages have not yet been sufficiently studied.

REFERENCES

[1] Originally the Afrasian verb had no tenses. This fact is usually pointed out in the grammars. However, it does not prevent the grammarians from denoting Afrasian aspectual forms as "tenses" (according to a tradition, dating from the 17th century and being the result of a mechanical transference of the categories of Latin grammar to other languages).

[2] In Cushitic languages there is only one pattern of prefixal conjugation of transitive verbs in the Punctual — *$\underset{\smile}{i}$a−$C_1C_2iC_3$. As it will be shown in detail below, in Semitic and possibly also in the Berber languages there was a distinction between fully transitive verbs, verbs of superficial, external or transient effects and intransitive or medial verbs. The verbs of motion were considered as verbs of action, and the place or direction of movement was regarded as the direct object of the action. This classification later ceased to be observed strictly, as a result of several causes — particular (e.g. phonotactical) as well as general — first of all, because of the typological restructuring of the language when the opposition 'action vs. state' was replaced by the opposition 'transitivity vs. intransitivity', and, later on, with the emergence of voices, tenses, etc.

[3] The form of the Jussive is used in Akkadian only in combination with praecative and prohibitive particles, and also in conditional sentences where the grammars usually subsume it under Perfective. However, the Jussive is well attested in many other Semitic languages as an independent verbal category. The Berbero-Libyan Jussive coincides with the Perfective; in Cushitic, forms of secondary origin are used.

[4] From the point of view of Akkadian grammar, the predicate of state is, structurally and functionally, rather a nominal than a verbal form — a feature of deep archaism.

[5] As well as in Auǯila and some other dialects. In other Berber languages the part of the Qualitative is played by the old verbal form of intransitive action, usually with the development of

the second stem vowel $*a > *\bar{a} > a$, owing to some older prosodic phenomena.

6 However, it is necessary to point out that J.Kuryłowicz, who put forward this theory in 1958 [Kuryłowicz 1958], gave it up without sufficient justification in his latest book [Kuryłowicz 1961]. There he did not take into consideration the data of other Afrasian languages, what is, as we believe, a methodological mistake. That is why, despite all its consequency, the second theory of Semitic apophony, proposed by J.Kuryłowicz, excites certain doubts, especially as regards relative chronology of the emergence of some linguistic phenomena.

7 O.Rössler had in mind Berber verbal forms of the pattern *i-farrəs* (Duratives). But this observation of his should be corrected. It is true that the Berber intransitive verbs do not have the form *i-farrəs*, but the reason of this is, that the latter is not the ancient Imperfective but originally the verbal D-Stirps (cf. below), which is always transitive by definition. Besides, as it seems, in Mahrī at least a part of intransitive verbs (verbs of state) also possess a fully vocalized Imperfective.

8 Thus, the situation is identical, e.g., in such archaic languages as Sumerian and Elamite, where the verb of action has two aspects, while the predicate of state is devoid of aspectual oppositions.

9 The opposition between perfective and jussive lay probably in the stress or tone.

10 We leave aside the question of the vocalism of the first syllable, and conventionally mark the vowel by the V-sign. Probably, this vowel could be not only $*i$ but also $*u; < *ə$ in both cases.

11 In Ethiopian, as well as in Akkadian, the form *jə-qattəl* spread also to intransitive verbs in the Imperfective; both forms of the Jussive, $*ia$-*prus* and $*iV$-*pras*, were preserved.

12 However, it is important to take into consideration that vocalic phonemes i and u are both, as it seems, reflexes of a single Proto-Afrasian phoneme $*ə$.

13 However, it is possible that the prefixed forms of the finite verb never existed in Omotic, and that the Omotic suffixal conjugation (where it survives) is a relic either of the ancient stative type conjugation, or of secondary forms developed from auxiliary verbs with suffixal conjugation.

14 We cite only the form of the Imperfective (and Jussive) for Arabic (here and below), because Arabic Perfective is of a later and secondary origin.

15 Later on *jiblaṭ* > *'ibluṭ*. Since the Imperfective, as it seems, is a secondary category for intransitive verbs, it did not preserve in Akkadian any other vocalization, except the one transferred to them by analogy from the transitive verbs of motion and medial verbs.

16 One should not confuse Central and Southern Semitic "Perfect" (= Perfective with suffixed conjugation, emerged from the Stative) with the Akkadian "Perfect" (a form based on the Imperfective with an infix $-t-$, which originally expressed the sequence of action, and later on supplanted the old Akkadian Perfective, also traditionally called "Preterite" (it was discussed above).

[17] Examining the place of the Akkadian Stative in the Common Afrasian grammatical structure, we should not compare the Cushitic "weak verbs", not only because they possess no common functions with the Stative, being a conjugational system which includes all tense and aspect forms, but also because their formal affinity with the Akkadian Stative is illusory. The only feature they have in common is, that they both have a suffixal conjugation. The *verbum substantivum* in Beḍawye only accidentally resembles the Akkadian Stative both in form and function: it is a verbal noun with a conjugated copula. Other Cushitic verbal forms of suffixal conjugation are of a similar origin. Only the 'dependent' forms of the Sidamo languages are directly related to the Afrasian Stative.

[18] According to a general rule, the short vowel is elided when preceding the accentuated syllable, therefore, the 3rd p. sing. is *paris* but the 1st p. sing. is *pars-āku*.

[19] Proceeding from the Akkadian patterns, it would be natural to suppose that the form **mariṣa* should be transitive, and **karuma*, **qatala* intransitive. But semantic patterns of the different vocalic types do not coincide in all details in the various Semitic languages.

[20] It is not attested in all Semitic languages, thus, e.g., Hebr. *qåṭal* 'he has killed' is a reflex of **qaṭal* but not of *qaṭala*.

[21] There can be no doubt of the possessive origin of the Old Egyptian verbal construction. Therefore, the hypothesis of O.Rössler, who explained the suffixal pattern of Old Egyptian conjugation by a simple inversion of the subject marker because of an alleged rearrangement of the sentence word-order, is completely unacceptable. Besides, from the morphological point of view Old Egyptian subject suffixes have nothing in common with Proto-Afrasian verbal subject prefixes.

[22] In this we disagree with W.Westendorf. In Afrasian languages, the participles, as a rule, are aspectless. It is probable that forms like *mrr* were participles of continuous action or state (Habitative, Durative). This is corroborated by the further semantic development of this form, as well as by parallels in Berber morphology (cf. above, on the Berber form *i-farrəs*).

[23] A certain tendency of such development, which is also observed in the Akkadian Stative, is, without any doubt, rather late, and is connected with the general transition from the ergative (or possessive) to the nominative construction, which was followed by changes in the role of transitivity, and in the character of the aspect and tense system in the framework of the verbal structure as a whole. This tendency can take place only when the structure as it is historically documented had already been formed.

[24] We must remind that Eg. *-f* < Afras. **-šu-*, exactly as Chad. *su*.

[25] Thus, the Passive Perfective is *qutila*, Passive Imperfective — *ju-qtal-u*, Passive Participle — *ma-qtūl-u-n*, etc.

[26] It is generally accepted that Ethiopian is less archaic than the old Southern Arabian languages, in which a Passive already did exist. But after the latest publications by R.Hetzron there is no reason to consider proto-Ethiopian to be less archaic than, i.e., Sabaean. The isogloss of Passive never reached it.

27   A direct negation is expressed by a negative Imperfective.

28   Such markers are, however, attested in some Chadic languages, possibly under the influence of a substratum.

29   More widely than in Semitic, was word-compounding spread in Proto-Berbero-Libyan, in Chadic, and, to a lesser degree, in the other African Afrasian branches.

30   From German *Grundstamm*. Otherwise it is denoted as the B stirps *(Basic)*.

31   R.Hetzron seems to be of the opinion that the stirpes with *t-* as a suffix, and *-t-* as an infix have a different origin, and consequently have a different history of semantic development.

32   The stirpes are marked here as suggested by W. von Soden for Akkadian. These designations may be applied without further comments to any Afrasian language. In Ancient Hebrew and Aramaic grammars traditional designations, introduced by medieval scholars and based on the patterns of the verb **p'l* are used: Hebrew *pi''el* (D); *pô'al* (A), *hiph'îl* (Š), *niph'al* (N), *hithpa''el* (T+D). The G stirps is marked as "light" *(qǎl)*; in Aram. *pǝ'al* (G), *pa''el* (D), *haph'el*, *'aph'el* (Š), *(h)ithpǝ'al* (T), *(h)ithpa''el* (T+D). In Arabic, Roman numeration is used: I (G), II (D), III (A), IV (Š), V (T+D), VI (T+A), VII (N), VIII (T), IX (variant of D), X (Š+T), etc. In Ethiopian the stirpes are usually marked by Roman numbers with an additional Arabic number for the element *-t-*.

33   There is reason to believe that the prefixed subject markers originally were either accented: **'ịa-*, or non-accented: **ịǝ-*, the latter variant later developing into *ịi-* and *ịu-*.

CHAPTER SIX

SOME DATA ON THE SYNTAX

§ 1. Word order

6.1.1. It is usual to define the word order in a language by a formula consisting of the terms V(erb), S(ubject), and O(bject). For Afrasian the order $V-S-O$ is thought to be the original. Indeed, this order is regarded as normal in Egyptian and in Semitic (Arabic, Hebrew, and others), its reversion in case of expressive emphasis being the more common exception. The divergent word order in Akkadian ($S-O-V$) is considered to have arisen under the influence of the Sumerian substratum; note however that the pronominal object, in distinction from the nominal one, everywhere follows the verb as a clitic. The same languages display the attributive construction usually in the order D(eterminatum)$-$A(ttribute). But in Cushitic and Chadic the word order is usually different: $S-O-V$ and $S-V-O$. The attributive construction in some of these languages shows the order $A-D$.

However, if in Proto-Afrasian we deal with an ergative type of language, these formulas do not apply. The components of the predicative sentence in such languages are the subject of action (Sa), the subject of state, including what in nominative type languages is the direct object (Ss), and the predicate (P), either verbal or nominal.

6.1.2. It is possible to establish the relative chronology of the different types of word order in the sentence if we compare them with the structuring of the verbal word-forms. In the SCB group the subject of the verb of action is represented by a prefixed personal marker$-$which, undoubtedly, derives from an independent pronoun in the oblique (ergative) case, denoting the subject of the action (Sa); the object of the action is represented by an enclitic pronoun (Ss); thus the verbal form itself represents a phrase with the order $Sa-P-Ss$ ($=O$). We can infer that the reason for this is that in the proto-language in question the subject of action preceded the predicative word, and the latter was followed by the subject of the state $=$ object. In other words, the 'Arabic' word order was not the original in Afrasian, or at least in the SCB languages. The contradiction between the structure of the verbal form, which also

in historical Semitic languages retains the now fossilized formula
Sa—P—Ss (= 0), and the structure of the whole sentence which is
formed according to the formula V = (Sa—P—O)—S (nominal) — O
(nominal) reflects an inner syntactical development of this group
of languages.

In the Stative, regarded as a predicative phrase, the original
order is, quite logically, P—Ss. It is clear that the prototype
of the Ss morpheme was a pronoun in the direct case, and if the
subject was a noun, the corresponding formula would still be P—S,
with the predicative noun in the direct case. The phrase could be
regarded as an appositional attributive one, where both components
possess equal valence. This is why (as we have seen above, § 5),
the direct case pronoun could also be regarded as a pronominal
predicative copula, and the predicate as the subject; cf. the
copula-morph (?) —j following the pronominal morph in the Egyptian
'qualitative-stative'.

It is well known that in Egyptian the predicate of the action
was expressed by an attributive or a prepositional phrase; it must
also be kept in mind that, as a rule, the Afrasian prepositions
derive from nouns and usually govern the genitive, and thus, the
prepositional phrase still remains a variety of the attributive one.
The subject of the action is expressed by a possessive (genitival)
pronoun or by a noun in the genitive following the predicate-deter-
minatum.

This shows, by the way, that there is a certain affinity in
Afrasian languages between the subject of action (Sa) and the at-
tribute (A), as well as between the predicate (P) and the determi-
natum (D). Hence the original word order Sa—P corresponds to the
order A—D in the attributive phrase. But this is exactly the si-
tuation in Chadic according to the explanation of the Western Chad-
ic verbal structure suggested by P.Newman and R.Schuh, and the
Western Chadic word order may thus be regarded as the original.
Like the Egyptian, the Chadic predicate is expressed by an attribu-
tive or a prepositional phrase, but the attribute takes the first
place and the determinatum (the predicative word) occupies the fin-
al position.

The reversion of the components of the attributive phrase in
Egyptian and in Semitic corresponds to the reversal of the structure,
in Egyptian, of the verbal form (itself one case of the attribu-
tive phrase), and, in Semitic, of the structure of the verbal sen-
tence (but not of the structure of the verbal form itself).

§ 2. Varieties of attributive phrase

6.2.1. While discussing the attributive phrase in Afrasian we
have been paying attention only to its simplest variety.

In practice we are confronted with several different possibili-
ties in these languages:

(a) The determinatum (in the st.constructus) immediately pre-
cedes the attribute in the genitive case (if this attribute is a
n o u n); when the attribute is an a d j e c t i v e, the determinatum
in the full form of the st. rectus (and when the case inflexion is

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lost — of the *st. absolutus*) precedes it, and there is concord in gender, number and case (Akk. *ɰarad śarr-i-m* 'king's slave'; *ɰard-u-m kēn-u-m* 'faithful slave');

(b) The determinatum in the full form precedes the attribute standing in the genitive case, but they are connected through a *nota genitivi*. If the latter can be declined, it agrees with the determinatum in gender, number and case. This type of attributive phrase is very ancient, since one and the same *nota genitivi n* is present in Berbero-Libyan, Egyptian, and Chadic. It must be noted, however, that in Semitic and Cushitic the *nota genitivi* is derived from other pronominal stems, cf. in the case of a nominal attribute: Eg. *mr n Ptḫ* 'beloved which (of=by the god) Ptaḥ'; Hausa *kane-n mutum* '(younger)-brother-which(of) man' = 'the man's younger brother'; Old Akk. *ɰard-u-m ču śarr-i-m*[1] (Babylonian [ɰ]*ardu śa śarri* [*m*]) 'slave who (m.) king's' = 'the king's slave'; *'am-t-u-m ča-t śarr-i-m* 'slave-girl who (f.) king's' = 'the king's slave-girl'. In the case of the attributive adjective: Berber Kabyle *sin i-rgaz-ən d-i-fqir-ən* 'two men which-poor-pl.' = 'two poor men'; Chad. Hausa *kane-n nan* 'younger-brother-which this' = 'this yonger brother'.

(c) When the attribute must be semantically emphasized it is moved to the front (usually with the *nota genitivi*), and the determinatum is accompanied by a 'catching-up' pronominal suffix which indicates the attribute. Another possibility is applied when the determinatum remains in its place but is accompanied by the 'catcher-up' pronoun: Akk. *śa śarri kalab-šu* 'which (the) king's, his dog'; Aram. *kalb-eh dī malk-ā* 'his dog, of the king' = 'the king, his dog', 'the king's dog'.

§ 3. Subordination

6.3.1. During the Ancient stage of development of the Afrasian languages the dependent (subordinate) clauses were treated as secondary parts of the main clause. Depending on their character, they could function as an attribute, direct or indirect object, or an adverbial modifier in the main clause. In Akkadian, for instance, the attributive subordinate clauses were introduced by a noun in the *st. constructus* (the form of the determinate noun) or by the *nota genitivi*. If a subordinate clause functioned as an indirect object the attributive phrase of the type (6.2.1 c) was used: *ɰard-u-m śa 'iqbi'-u* '(the) slave who (he-)said', but *ɰard-u-m śa 'i-qbi'-u-šum* 'the slave to whom (he-)said', lit. 'slave, who, (he-) told-him'. In some languages (e.g., in Egyptian, some of the Cushitic), in the case when the determinate noun was feminine, the subordinate clause had to agree with it in gender; various means were used for this. The structure of the objective, circumstantial and other dependent clauses was similar to that of the attributive ones. Either the whole of the dependent clause (in some Cushitic languages) or its predicate were accompanied by the marker of the case in which a noun playing the same role as a member of the main clause would have been used, i.e., an attributive clause was followed with the genitive marker, a final clause — with the dative or locative marker, etc. These case markers later developed into morphemes that denoted

verbal moods (thus in Semitic). However, such categories had almost completely disappeared after the Middle stage in the Afrasian languages.

<p style="text-align:center">* * *</p>

Above, we have attempted to describe the main features that characterized the most ancient stage of the Afrasian languages. It has not been possible to trace the considerable changes that took place during the period of independent evolution of the separate branches and, still later, of the individual languages of this family.

REFERENCE

[1] In the Genitive: *yard-i-m či šarr-i-m.*

TEXT SAMPLES

(1) *Semitic**

Akkadian

(1) Old Akkadian (Diyala dialect)
(a) *e-nu na-bí-u[m] šu-ut gi-śum il-gi-am-ma it-ba-lu na-bí-um*
KÁ ᵈTIŠPAK *it-ma 1* DINGIR-*al-su.* DI.TAR *1* DINGIR-*dan šu* GUD.
GUD PA. RIM₄ *1 e-ru-ru šu* AB+ÁS URU*ki 1 i-g[u]-num* DUMU *e-*
[*n*]*i-um* [*2(?)*] AB+ÁS [*gi*]*-śum*
(b) *en-ma ma-nu-nu a-na gi-nu-nu in* É *ši uš-da-a-bí-la a-na ši-*
tim SÁM-*mè lu-uš-ku-ul-kum al-kam-ma ba-dam*
T r a n s c r i p t i o n: (a) *'enū Nabi'um čūt Qīsum ţilqeḥ-am-*
ma ţitbal-u, Nabi'um 'abul Tišpak ţitmā; 'Ilī-ʿalsu, daţţānum, 'Ilī-
dan ču Kūku (?) rābiçum ʿErūru ču šīb 'ālim, Ţikūnum mar(i)ʾʿEni'um
činā šībā Qīsum.
(b) *hen-ma Manūnu 'ana Kinūnu: 'in bētim či ţušta'pil-a 'ana*
šītim šīmam-mi lučqul-kum, 'alk-am-ma bāt-am.
T r a n s l a t i o n: (a) Utensils of Nabi'um, which Qīsum
took and carried away. Nabi'um, in the gate of (the god)
Tišpak made an oath; (one) 'Ilumʿalšu, (was the) judge,
and (one) 'Ilīdan (of the family) of Kūku, (was the) at-
torney, ʿErūru (of the family) of (the) city elder, (and)
Ţikūnum, son of ʿEni'um, (were) [(the) two] witnesses of
Qīsum.
(b) Thus (saith) Manūnu to Kinūnu: «In (the) house
which I have caused to be given (as payment?), for the
balance (residue) I shall weigh you out the price; come
here and stay overnight».

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* Only a minimum of text samples in Semitic languages is
presented. For more material, see **G.Bergsträsser**. Einführung in
die semitischen **Sprachen**. München 1928.

Notes:

'enū probably for *'inū*, pl. of *'ini-* 'utensil'.
čūt relative pronoun m.pl.nom., denoting possession.
ii-lqeh-am-ma 3rd p.m.sg. Perfective + Ventive (=1 p.sg.
of the dative pronoun) + enclitic conjunction *-ma*. Verb
lqh 'to take'.
ii-tbal-u 3rd p.m.sg. Perfective, subjunctive mood.
Verb *tbl* 'to carry away'.
'abul st.constr. of *'abull-um* 'gate'. Borrowing. The
word is in the Accus. loci.
Tišpak name of a deity.
ii-tmā 3rd p.m.sg. Perfective of the verb *tm'* 'to
swear'.
'Ilī-'al-šu proper name meaning 'my god (is) over him'.
daiiānum nomen professionis from the verb *din* 'to judge
righteously'.
'Ilī-dan proper name meaning 'my god is strong' (*dan*
stative).
šu relative pronoun m. sg.nom. denoting possession.
The following name in the nominative is that of the fa-
mily head or ancestor.
rābičum part. actionis of the verb *rbē* 'to lay in
wait, to lay down (of animals), to represent in court',
etc.
šīb st.constr. of *šībum* 'old man, elder; witness'.
Dual *šībā*.
en-ma particle introducing direct quotations (< *'in-* +
conjunction or emphasizing particle *-ma*).
'ana preposition 'to'.
'in particle 'in'.
bētum 'house', genitive sg.
či relative pronoun m. denoting possession, genitive
in concord with *bētim*.
iu-š-ta-'pil-a Š-stirps (causative), 3rd p. m. sg. Per-
fective + *-a* dialectal suffix of the subjunctive (?)
mood. Verb *'pl* (or *'bl*, hence translation uncertain).
lu-čqul-kum 1st p.sg. Praecative (= Jussive + affirma-
tive particle *lu-*) of the verb *čql* 'to weigh' + dative
enclitic personal pronoun of the 2nd p.m.sg.
'alk-am-ma 2nd p.m.sg. Imperative of the verb **hlk* 'to
go' + *am* dative enclitic personal pronoun of the 1st p.
sg. (= ventive) + enclitic conjunction *-ma*.

bātam or *bādam* is the same verbal form, presumably
meaning 'to spend the night'.
(2) Old Babylonian (Laws of Hammurapi, § 3), T r a n s-
c r i p t i o n:
*šum-ma 'auīlum 'ina dīnim 'ana šībūt carratim 'ōçi'ammā, 'auāt
'iqbū lā 'uktīn, — šum-ma dīnum šū dīn napištim, 'auīlum šū 'iddāk.*
(3) Literary "Young Babylonian" (The Epic of Gilgameš,
VIII, 1 ff.), T r a n s c r i p t i o n:
*anāku amāt-ma ul kī Enkidu-mā? niccatu īterub ana karšī-ia,
mūta aplah-ma, arappud çēra; ana līt Utnapišti, mār Ubār-Tutu, ur-*

ḫa ṣabtākū-ma, ḫanṭiš allak before vowel probably lost only in spelling).

T r a n s l a t i o n :

(1) If a man at a trial appears for false evidence (= in order to present a false evidence), and does not substantiate the word he has spoken, − (then), if the trial is a trial of life (and death), this man shall be killed.

(3) (Even) I, shall I not die too, just as Enkidu? Sorrow has entered into my stomach, I have become afraid of death, and I run (over) the steppe; to the power(?) of Utnapišti, the son of Ubār-Tutu, I make (my) way, hurriedly I go.

N o t e s :

šum-ma 'if'; Common Semitic **šin/m* 'if' + enclitic conjunction *-ma*.

'awīl- n. subst. m. 'man'; N.Sg. with mimation *'awīlum*. NB: all words beginning with a vowel have in reality an '-Anlaut not reproduced below!

ina preposition.

dīn- n.subst.m. 'justice', here 'trial'; N.Sg. with mimation *dīnum*, G. *dīnim*, St.constr.N. *dīn*.

ana preposition.

.šībūt- n.subst. f., abstract noun in *-ūt-* from **ēīb-/ *šīb-* 'gray-haired, old', 'elder, witness'; St.constr. *šībūt*.

carr- n.adj. 'false'; f. used as abstract noun 'lie'. G.Sg.f. with mimation *carratim*; lit. 'evidence of lie'.

ōci'amma < **ịa-ụ̂ci'-am-ma* 3rd p.m. Sg. Jussive from root **ụ̂ê'* 'to go out' + ventive suffix *-am* (originally suffixed pronoun of the 1st person of the indirect object) + enclitic conjunction *-ma*.

awāt- (root **hụị*) n.subst.f. 'word'. St.const. *awāt*; the Status constructus here introduces a subordinate clause.

iᵃᵇ̂û < **ịa-qbi(')-u* 3rd p.m. Sg. Perfective Subjunctive fr root **qbị* 'to say'.

ịā negation.

ịktīn < **ịu-k-ta-'in* 3rd p.m. Sg. « Perfect », Stirps D, root **kụn* 'to be constant'. The use of the « Perfect » (infix *-ta-*) denotes that the action has been perfected a f t e r another action (here *iqbû*).

napiš-t n.subst.f. 'soul, life'; G. with mimation *napiš-* *+ ·ᵐ.*

.ū demonstrative pronoun (also personal pronoun, 3rd p. ·g.); < **šû*.

iddâk < **ịa-n-du'ak* 3rd p.m. Sg. Imperfective, Stirps N (reflexive) from root **'ịk* 'to kill'.

anāku 'I' (emphatically stressed).

amāt-ma < **a-mu'at-ma* 1st p. Sg. Imperfective from root **mụt* 'to die' + enclitic conjunction *-ma*.

ul negation.

kī preposition 'as, like'.

Enkidu borrowed proper name, indeclinable (Genitive!)+
enclitic conjunction *-ma* (here in the sense 'just as E'.
≪ Long ≫ *-ā* due to interrogation).

nicc-at- n.subst.f. 'sorrow', N.*niccatu*. The mimation
has been lost at this period.

īterub < **įa-γ-ta-rub*, 3rd p.m. Sg. ≪ Perfect ≫ from root
*γrb 'to enter', denotes action perfected after the pre-
ceding (sc. Enkidu *imūt* 'E. died').

karš- n.subst.m. 'stomach'; *karší-įa* G.St. pron. + suf-
fixed possessive pronoun of the 1st person *-įa*.

mūt- < **maųt-* n.subst. 'death'; Acc. *mūta*.

aplaḫ-ma 1st p. Sg. Perfective transitive from root
*plḫ 'to be afraid; to revere' (*a* instead of *u* due to
influence of *ḫ*) + enclitic conjunction.

arappud 1st p. Sg. Imperfective from root **rpd* (verb
of motion, construed with Acc.).

çēr- n.subst.m. 'steppe', Acc. *çēra*. Root **çaḫr*.

līt- n.subst.f., St.constr. *līt*.

Utnapišti, Ubār-Tutu, proper names, indeclinable.

mār- < **mar'-* n.subst.m. 'son', St.constr. *mār*.

urḫ- n;subst.m. 'way', Acc. loci *urḫa*.

çabtākū-ma 1st p.Sg Stative from root **çbt* to take, to
hold, here in an active sense, hence construed with dir-
ect object: 'I have taken the way and still keep to it'.
Enclitic conjunction *-ma*, probably inducing ≪length≫ of
the preceding vowel.

ḫanṭiš < **ḫamṭ-iš* adverb formed with Dative-Locative
ending *-iš* from adjective *ḫamṭ-*'quick, speedy'.

allak (< *a-'ḫallak) 1st p. Sg. Imperfective from root
*(h)lk 'to go'.

Arabic

(N.V.Jušmánov. *Stroį arabskogo įazyka*. Leningrad 1938, p. 51)

*qadima 'ilā Ma'ni bni Zā'idata 'asrā; fa-'amara Ma'nun bi-
ṭa'āmin, fa-'uḫḍirat-(i)l-mā'idatu ųa-'alaį-hā ṭa'āmun; fa-ǧta-ma'ū
ųa-'akalū, ųa-Ma'nun įanẓuru 'ilaį-him; fa-lamma faraγū, qāma
raǧulun min-hum ųa-qāla: "'aįįuhā-l-'amīru,(u)nẓur, mā-dā įaçna'u
miṭlu-ka bi-'aḍįāfi-hi?", fa-ḫalla sabīla-hum.*

Translation:
(There) arrived prisoners-of-war to Ma'n, son of
Zā'idah, and Ma'n ordered to feed (them), and (there)
was brought the table, and food on it; and (the prisoners)
gathered and ate, and Ma'n was watching them; and after
they were ready, a man amongst them stood up and said:
≪ Oh, (my) lord, look, what (is) it that the like of thee
ought to do to his guests? ≫, and (Ma'n) let them go their
way.

Notes:
qadima 3rd p.m.Sg. ≪ New Perfective ≫ intransitive
from root **qdm* 'to arrive'. A verb standing before its
subject is not in concord with it as to number.

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'ilā preposition (*'ilai̯-* with suffixed pronoun).

Ma'n, proper name; N. with nunation *Ma'nun*, G. *Ma'ni(n)*: no nunation when determined by an attribute.

(i)bn- n.subst.m. 'son' G.St.constr. *(i)bni-*.

Zā'idatu proper name, diptotic, G.-Acc. *Zā'idata*.

'asrā Pluralis fractus < **'asraȷ̣u*, diptotic (hence without nunation), Sg. *'asīr-* 'prisoner-of-war'. Root *'cr*.

fa- conjunction, denotes change of subject.

'amara 3rd p.m. Sg. « New Perfective » from root **'mr* 'to say, to order'.

bi-ṭa'āmin lit. 'in food', see *ṭa'ām-*.

'uḥḍirat 3rd p.f. Sg. « New Perfective » passive, Stirps Š (**š-* > *'-*) from root **ḥḍr*.

mā'id-at- n.subst.f. 'table'; with article, N. *al-mā'idatu* (no nunation!). The vowel of the article elided.

u̯a- conjunction.

'alai̯- preposition (+ suffixed possessive pronoun of the 3rd p.f. Sg. *-hā*).

ṭa'ām- verbal noun from root **ṭ'm* 'to eat, to taste, to gulp down'; N.Sg. with nunation *ṭa'āmun*.

(i)ǧtama'ū 3rd p.m.Pl. « New Perfective », Stirps T (reflexive) from root **ǧm'* 'to gather'.

'akalū 3rd p.m.Pl. « New Perfective » from root **'kl* 'to eat'.

i̯anẓuru 3rd p.m.Sg. « New Imperfective » transitive from root **nẓr* 'to look, to watch'.

lamma 'after'.

fara̯ū 3rd p.m.Pl. « New Perfective » from root **prǧ* 'to get ready'.

qāma 3rd p.m.Sg. « New Perfective » from root **qu̯m* 'to stand up'.

raǧul- n.subst.m. 'man'; N. with nunation *raǧulun*.

min-hum preposition *min* 'from' + suffixed pronoun of the 3rd p.m.Pl. *-hum*.

qāla 3rd p.m.Sg. « New Perfective » from root **qu̯l* 'to speak, to say'.

'ai̯i̯uhā interjection.

(a)l-'amīru n.subst. m.N. with article 'lord'.

(u)nẓur Imperative of **nẓr* 'to look, to watch'.

mā-dā a combination of two (originally demonstrative) pronouns.

i̯aṣna'u 3rd p.m.Sg. « New Imperfective » transitive (*a* due to influence of ') from root **ṣn'* 'to do'.

mitl- n.subst.m. 'equation, equivalent'; St. pronominalis with suffixed possessive pronoun of the 2nd p.m. Sg. *-ka*.

bi- preposition.

'aḍi̯āf- Pluralis fractus, Sg. *ḍai̯f-* 'guest'. Root **ḍi̯p*; *-hi* (< *-hu* after *-i*) suffixed possessive pronoun of the 3rd p.m.Sg.

ḥalla < **ḥalala* 3rd p.m.Sg. « New Perfective » transitive, root **ḥl* 'let go'.

sabīl- n.subst.m. 'way'; Acc. loci St. pronominalis with suffixed pronoun of the 3rd p.m. Pl. *sabīla-hum*.

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'ilā preposition (*'ilai̯-* with suffixed pronoun).

Ma'n, proper name; N. with nunation *Ma'nun*, G. *Ma'ni(n)*: no nunation when determined by an attribute.

(i)bn- n.subst.m. 'son' G.St.constr. *(i)bni-*.

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'alai̯- preposition (+ suffixed possessive pronoun of the 3rd p.f. Sg. *-hā*).

ṭa'ām- verbal noun from root **ṭ'm* 'to eat, to taste, to gulp down'; N.Sg. with nunation *ṭa'āmun*.

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raǧul- n.subst.m. 'man'; N. with nunation *raǧulun*.

min-hum preposition *min* 'from' + suffixed pronoun of the 3rd p.m.Pl. *-hum*.

qāla 3rd p.m.Sg. « New Perfective » from root **qu̯l* 'to speak, to say'.

'ai̯i̯uhā interjection.

(a)l-'amīru n.subst. m.N. with article 'lord'.

(u)nẓur Imperative of **nẓr* 'to look, to watch'.

mā-dā a combination of two (originally demonstrative) pronouns.

i̯aṣna'u 3rd p.m.Sg. « New Imperfective » transitive (*a* due to influence of ') from root **ṣn'* 'to do'.

mitl- n.subst.m. 'equation, equivalent'; St. pronominalis with suffixed possessive pronoun of the 2nd p.m. Sg. *-ka*.

bi- preposition.

'aḍi̯āf- Pluralis fractus, Sg. *ḍai̯f-* 'guest'. Root **ḍi̯p*; *-hi* (< *-hu* after *-i*) suffixed possessive pronoun of the 3rd p.m.Sg.

ḥalla < **ḥalala* 3rd p.m.Sg. « New Perfective » transitive, root **ḥl* 'let go'.

sabīl- n.subst.m. 'way'; Acc. loci St. pronominalis with suffixed pronoun of the 3rd p.m. Pl. *sabīla-hum*.

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(2) *B e r b e r*

Old Libyan (Eastern Numidian)

(Quoted from: A.B.Dolgopol'skiĭ. *Numidiĭskoe (vostočno-liviĭskoe) pis'mo Severnoĭ Afriki*, in: « Taĭny drevnikh pis'men », Moscow 1976. Reinterpreted by A.Yu.Militarev).

ṣkn Tbgg bnyfšḥ Mɛnsn gldt₂ wGyy gldt₂ wZllsn šfṭ s₂bs₂n-dH s₂gdt₂ sysH gld Mkwsn šfṭ gldt wFšn gldt mwsnH Šnk wBny wŠnk dŠfṭ wM... wTnkw mş̣ṣkw Mgn...

T r a n s l a t i o n :
(They) built, (the citizens of) Tabagga, the house for sacrifice to that Massinissa (the) king, son of Gayy, son of Zalalsan (the) sufetes, in the year ... (when) reigned that Micipsa (the) sufetes (and) king, son of Afšan (the) king; and the «centurions» (were) Šank, son of Banay, son of Šank, and Safoṭ, son of M..., son of Tankaw; (and the) construction supervisor was Magon...

N o t e s :
ṣk-n 3rd p.pl. Perfective of the verb ṣk(w) 'to build'.
Tbgg (< **tawwagga*) the town of Thugga, modern Dugga, a site in Tunisia; cf. **ww* > *bb* in Qabyle and some other modern Berber languages.
bnyfšḥ: to be divided into three words: *bn* 'house'; *y* preposition *(y)i* 'for' and *fšḥ*(?), possibly the name of the 'passover-sacrifice', borrowed from Hellenistic Jews, cf. πάσχα in the Septuagint for Hebrew *psḥ* < [pésah]. The much-discussed sign we suggest to interpret as from Punic Ч, to be read, depending on position, as [k] or [ḳ], i.e. [kh]. The Punic sign for *ḥ* was originally also used for [ḫ]; but there was a need for an extra sign to render the Greek 'chi' and the Hebrew and early Phoenician *ḥ* in its pronunciation [ḫ], lacking in the Old Libyan consonantal system. The contested word *fšḥ*(?) must anyway mean some cultic action.*
Massinissa-n proper name of the famous Libyan king followed by the enclitic demonstrative pronoun, cp. Qabyle *-nni* 'that, that very, that in question'. According to O.Rössler, status demonstrativus.
gld-t₂ [a-gəllid-ət?] f., lit. 'dignity of an *a-gəllǐd* (king)'.
šfṭ borrowing from Phoenician (Punic) *šūpēṭ* (cp. Hebrew *šōpēṭ* 'judge'), Latin *su(f)fetes* 'consul in Carthage'.
w 'son' (Common Berber **aṳ*).
s₂bs₂ (< **sɛṳwas*) 'year, time, epoch'; *n* nota genitivi; *dH* probably [daγ] 'during, while'.
s₂gdt₂ obscure, probably causative in *s-* (*s₂-* rendering the voiced variant of the etymological **š-* before the following voiced stop?) of the verb *gd* (meaning obscure);

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*· Cf. *Thapsacus*, transcription of a toponym in Syria n the Euphrates, probably < Sem.[tap̄sah] 'ford'.

$-t_2$ (rendering $-\underline{t}$ in a postvocal position?) being an encli-
tic personal pronoun, 3rd pers.m., sg. of the direct
object.
    gld probably Perfective 3rd p.sg. of the verb 'to
reign'.
    d- conjunctive particle, *šft* here a proper name.
    mṣṣkɔ nomen agentis, possibly of the causative stem
of the verb *ṣk(ɔ)* 'to build' with a secondary glottaliza-
tion of the causative prefix, i.e. **m-s-škɔ* 'the one who
makes build', 'supervisor'.
    Mgn proper name of Phoenician origin.

Kabyle (Zouaoua)

(R.Basset. *Manuel de langue kabyle.* II. Paris 1887)

    *nǝk uṣǝl-ǝɣ ɣǝr u-drar; i-brid-an dir-it ǝn ta-sǝrdun-t in-u ur
tǝ-zmir; a-sif iaḥmǝl; ǝns-iɣ ɣ-Tǝlammǝt; bǝṭṭ-iɣ a-ɣǝrum id sin
i-rgaz-ǝn d-i-fqir-ǝn, d-i-msafǝr-ǝn, ɣ(ǝ)f-i-ḍar-ǝn ǝn-sǝn.*
    T r a n s l a t i o n:
I arrived at a mountain; the roads (were) bad, (so)
my she-mule could not manage; the river was overflowing;
I spent the night in Tǝlammǝt; I shared the bread with
two men, poor (and) wandering on foot.
    N o t e s:
    nǝk I.
    uṣǝl-ǝɣ 1st p. Sg., root **uṣl* 'to arrive'. Arabism.
    ɣǝr preposition (originally noun, hence St. annexus
in the next word).
    u-drar n.subst.m.Sg., St. annexus 'mountain'.
    i-brid-an n.subst.m.Pl. 'roads'.
    d- particle before adjectival attribute.
    dir-it Qualitative pl. (sg. *diri*) 'to be bad'. R.Basset
regarded the following *ǝn* as part of the Qualitative plur-
al form, but perhaps it should be regarded as a *nota gene-
tivi* introducing the following subordinate phrase 'my
she-mule not endured'.
    ta-sǝrdun-t n.subst.f.Sg. 'she-mule'. In Kabyle, *t* cor-
responds to Common Berber *t* (but *t* after *n*).
    in-u Possessive pronoun of the 1st p.Sg. *-u* introduc-
ed by *nota genitivi (i)n.*
    a-sif n.subst.n.Sg., St. liber 'river'.
    iaḥmǝl Arabism 'was overflowing'.
    ǝns-iɣ 1st p.Sg. from *ǝns* 'to spend the night'. Root
*m̥s.
    ɣ — preposition (< *ḡ-*).
    bǝṭṭ-iɣ 1st p.Sg., root *bǝṭṭu* 'to divide'.
    a-ɣǝrum n.subst. m.Sg., St. liber 'bread'.
    id preposition.
    sin 'two'.
    i-rgaz-ǝn n.subst.m.Pl. 'men'.
    i-fqir-ǝn, i-msafǝr-ǝn n.adj., Arabisms 'poor', and
'wandering'.

γ(ə)f- preposition.
i-dar-ən n.subst.m.Pl. 'feet'.
ən-sən possessive pronoun of the 3rd p.m.Pl. (*nota genitivi n-* + suffixed pronoun).

Siwa

(E.Laoust. *Siwa*. Paris 1932)
Commentary by A.Aichenwald

azidi d illa g ədrär, itisu aman; tizmərt təlla ddāy. azidi yummas: ita ḥubbāšṭi aman-ənnᵃo? tizmərt tummas: aman d illan g-ʿali, itəggəzən yəgda. yummas: ʿam nuwəl nis uṭnaγa, səm əd̄ūqqāṭ ṭarən-ənnəm. tummas: niš n-asəggasa. nəmma umma-nnəm nəmma aḥa-nnəm. b̌ʿadin ičit.

Translation:
(The) jackal was in (the) mountain, he was drinking water; (a) sheep was there. (The) jackal said (to) her: why (do) you stir (in) my water? (The) sheep said (to) him: (the) waters are on top, they fall down here. He said (to) her: last year I was ill (and) you stamped your feet (making the water turbid). She said: I (am) of this year (I am less than one year old). (He said:) (it may have been) either your mother or your aunt. Then he ate her.

Notes:
a-zidi 'jackal', *a-* an old lexicalized definite article.

d existential particle preceeding the verb of existence in Siwa.

illa (< **y-əlla/i*) 3rd p.m.sg. Perfective of the verb 'to be'.

i-t-isu 3rd p.m.sg. Habitative Imperfective of the verb 'to drink'.

aman 'water' (pl.); the singular *am(a)* is almost never used in Berber.

t-i-zmər-t 'sheep', f. sg. of *i-zimmər* 'ram'.

t-əlla 3rd p. f. sg. Perfective (see above) 'she was'.

y-umm-as 3rd p. m. sg. Perfective of the verb *umm* 'to say' + *-as* enclitic pronoun of the indirect object, 3rd p.sg. common gender.

ḥubbāš-ṭi 2nd p. sg. common gender Perfective. The usual interpretation of this form is that of a development of the Common Berber **ti-ḥubbāš-ti,* , *-ṭ-* being an unmotivated «emphatic» variant of the Afrasian and Berber *-at*; similar suffixed forms are known also to occur with the Imperfective. However, on the analogy of the inflexion *-əγ* for the 1st p. sg. which is obviously borrowed from the Stative, the *-ṭ* in our example is perhaps better explained as a relic of the Common Berber Stative, *-aṭ* in Kabyle.

aman-ənn^a*o* 'my water', *ənn*^{a}*o* (< *-*ənna-ū*) enclitic posessive pronoun, 1st p. sg.

t-umm-as 'she said (to) him' 3rd p. f. sg. (see above)

i-t-əggəz-ən 3rd p. pl. Habitative Imperfective.

niš (< *nik*) independent personal pronoun 1st p. sg.

uṭn-aγa 'I was ill', 1st p. sg. Stative of the verb *utən*.

šəm (< *kVm*) independent personal pronoun 2nd p. f. sg.

tar-ən 'feet' (pl.), *ənnəm* enclitic possessive pronoun 2nd p. f. sg.

n- nota genitivi, *asəggas* 'year', *-a* enclitic demonstrative pronoun.

ič-it (< *y-əč-it*) 3rd p. m. sg. Perfective of the verb *əč* 'to eat' + *-it* enclitic pronoun of the direct object, 3rd p. sg. common gender.

(3) *Cushitic*

On the verb in Cushitic

In this book we use the terms 'Perfective — Imperfective' for the sake of uniformity. In Cushitic, the verbal finite forms are usually classed as 'Past — Non-Past' (R.Hetzron, A.Zaborski), Perfetto — Imperfetto (M.Moreno), Perfektum — Präsens (L.Reinisch).

A.Zaborski, R.Hetzron and others differentiate the following finite verbal forms in Cushitic:

(1) Archaic prefixal Perfective and Inperfective forms also with infixation and suffixation; preserved only in some of the most archaic verbs. These forms correspond to our 'Old Perfective' and 'Old Imperfective' in Semitic, e.g. in Akkadian;

(2) Common Cushitic suffixal Perfective and Imperfective forms (R + 'Old' prefixally conjugated auxiliary verb *'ana* or *(h)ai* 'to be' > 1st p. sg. *-'e*, *-'i* / *-'a*, 2nd p. sg., 3rd p. sg. fem. *-te*, *-ti* / *-ta*, 3rd p. sg. masc. *-i*, *-∅* / *-a* etc.

(3) Suffixal Perfective and Imperfective forms, having been innovated in the individual branches of Cushitic from constructions with auxiliary elements other than *(h)ai*, e.g. *kʷ* in Agaw.

In languages which have introduced innovative finite verbal forms, the Common Cushitic finite verbal forms are limited to subjoined predicates. In Sidamo, such forms of the subjoined predicate are partly innovative (3), and partly Common Cushitic (2) (= 'Old' prefixal conjugation of the auxiliary verb developed into a 'New' suffixal conjugation): 3rd p. sg. masc. *-no*, 3rd p. sg. fem. *-tu* are innovative, but 3rd p. sg. fem. *-té* is Common Cushitic (< 'Old' prefixal (?) or even suffixal Perfective conjugation).

T.V. I.D.

Beḍawye (Had'endawa dialect)

(L.Reinisch. *Die Beḍauye-Sprache in Nordost-Afrika.* I,
Wien 1895, pp. 56—57)

(1) *Mar'tad i'bābi̯a, 'Massir 'ēbē, ma'lō tirg' i'sa', So'dān
'ēbē, Sodānib i'sa', y̑ū-'ō'r-ūh əl'hii̯a; 'had'ātdə'hā 'ēta:* « *'ane
'mhēlane*» *'tēne; te'had'a y̑ō-'or mə'helta, y̑ū-'or i'i̯a'*.
(2) *Sul'tān 'ife, 'ōt 'ibire; tū-'o't-ūh 'markab ti'hāi̯,
i'bābta. Tak 'ekhan sul'tāni tō-''ōrt; ūn ū-'tak 'markab dem'a'rab
'šāni̯a.*

Translation:
(1) Martad went away, came to Cairo, dwelled (there
for) two months, came to Sudan, dwelled in Sudan, his
son fell ill: to an old woman! she came, said "I will
treat (him)"; the old woman treated the son, the son
died.
(2) (There) was a sultan, he had a daughter; his
daughter boarded a ship (and) went away. A man fell in
love with the sultan's daughter; this man loaded gold
(into the) ship.

Notes:
ibābi̯a 3rd p.m. Sg., *ibābta* 3rd p.f. Sg. Perfective,
« New (weak) conjugation», verb *ibāb* 'to travel' < Arab.
*hibāb; -i̯a < *i̯a-'an; -ta < *ta-'an.*
ē-bē 3rd p.m. Sg. Perfective, «Old (strong) conjuga-
tion» verb *bāi̯* 'to come'.
malō 'two'.
tirga 'months', Sg. *terig.*
i-sa' 3rd p.m. Sg. Perfective, «Old (strong) conjuga-
tion», verb *sa'* 'to dwell'.
Sōdanib Acc. loci (*-b < *-y̑a; -y̑* masculine ending + *-a*
Acc. ending).
(y̑)u N., *y̑o* Acc. masculine article.
'ōr n.subst.m. 'son'; *'ōr-t, 'ōt* n.subst.f. 'daughter'.
-ūh dialectal for *-ūs:* suffixed possessive pronoun of
the 3rd p.m. Sg. *-s > -h* with the connective element *-u-.*
əlhi-i̯a 3rd p.m. Sg. Perfective « New conjugation»,
verb *ləh* ‖ *əlh* 'to be or fall ill?'.
had'a n.subst. 'old man; old woman'; *had'āt* expressing
direction and depending upon an implied verb of motion
expressing direction.
dəha postposition.
ē-ta 3rd. p.f. Sg. Perfective, « New (weak) conjuga-
tion», verb *ii̯* 'to come'; *-ta < *ta-'an.*
ane mhēlane dialectal form for *ani mhelani; ani* I',*mhēla-
ni* 1st p. Sg. Imperfective, «New conjugation»,verb
*məhel; -ani < *a-'ani; məhelta* 3rd p.f. Sg. Perfective, «New
conjugation ».
t-ēne 3rd p.f. Sg. Imperfective, «Old (strong) con-
jugation», verb *an* 'to say'.
te-had'a Allegro-form for *tū-had'a; tū* N., *tə* Acc. femi-
nine article.

i-ḭa' 3rd p.m. Sg. Perfective, «Old conjugation»,
verb *ḭa'i* 'to die'.

sultān Arabism, G. *sultāni*.

i-fe 3rd p.m. Sg., Perfective «Old conjugation»,
verb *fāḭ, hāḭ* ~ Sem. **hiḭ*.

i-bire, do., verb *bari* 'to have'.

markab Arabism 'ship'.

ti-hāi 3rd p.f. Sg. Perfective, Stirps A, «Old con-
jugation», verb *hai* 'to dwell' ~ Sem. **hiḭ*.

tak n.subst.m. 'man'.

e-khan 3rd p.m. Sg. Perfective, «Old conjugation»,
verb *kehan* 'to love'.

un demonstrative pronoun.

dem'ar-ab n.subst.m. Acc. 'gold'.

šān-ḭa 3rd p.m. Sg. Perfective, «New conjugation»,
'to load' (borrowed? Cf. Arab. *ẓaʿana*, Mehri *šān*).

Oromò

(G.B.Gragg. *Oromo dictionary.* East Lansing, 1982, pag.var.)
Commentary by T.Vetoshkina

(1) *Miill-i[1] kaleessa daqaa-n[1] na[2] rukut-e[3] sun[4] na[2] iita'-e[3].*
(2) *Yoo daak-aa[5] beek-te[6] daak-tuu[7] jed-am-ta[8].*
(3) *Mana adem-naan[9] raf-i[10].*
(4) *Bor Wallaggaa-n[11] akka[12] deem-u[13] beek-na[14].*
(5) *Adurre-n-koo[15] simbir-oota[16] ari'a-tee[17] ñaa-ta[18].*
(6) *Nam-ičč-i[19] inni[20] kaleessa arg-ine[21] abbaa-koo-ti[22].*
(7) *Nam-ičč-a[19] isa[23] kaleessa arg-ine[21] an[24] im-beek-u[25].*
(8) *Hundee-n[1] muka kana[26] gadi-fagoo-da[27].*
(9) *Wal[28] ga'-anii[29] faars-aa[5] fāars-u tur-ani[30].*
(10) *Gorsa hiriyya kan[31] in-fudan-ne[32] hin-fayy-u[33].*
(11) *Maaliif akka[12] nama jinnii-n[1] rukut-e[3] goda-tee?[34]*
(12) *Biyya gamoojii-tti[35] gaalaa-n[11] adeem-uu tur-ani[36].*
(13) *Abdiisaa-n[1] kaleessa duf-e[3] Čaaltuu-ni-s[37] bor hin-duf-ti[38].*
(14) *Man-ni-koo[15] mana-kee-tii-f[39] mana Gammaččuu gidduu[40] jir-a[41].*

Translation:
(1) My foot that a stone hit yesterday has swollen.
(2) If you know how to swim (lit.: know swimming),
you are called a swimmer.
(3) Having come home, go to sleep (lit.: house having-
come sleep).
(4) We know that he is going to Wallagga to-morrow.
(5) My cat chases birds (and) eats (them).
(6) The man we saw yesterday, was my father (lit.:
the-man he yesterday we-saw father-my-is).
(7) I don't know the man we saw yesterday (lit.: the-
man him yesterday we-saw I don't-know).
(8) The root of this tree goes deep (lit.: below-far-
is).

(9) They got together (and) sang songs (lit.: each-other having-met-they singing they-sang-continuously).

(10) One who does not accept the advice of companions will not prosper (lit.: advice of-comrade who does-not-accept will-not-prosper).

(11) Why did you behave like a man struck by a genie?

(12) In the lowlands they used to travel by camel.

(13) Abdisa yesterday came (m.), (and) Čaltu will come (f.) tomorrow.

(14) My house is between your house and Gammaččcu's house.

Notes:

1. Thematic case. When there is no note defining the case of the noun, the former should be regarded as Absolute. Moreno and Gragg discern only two nominal cases in Oromo, the Thematic and the Absolute. Dolgopolsky finds four, adding the Genitive and Dative, these being differentiated from the Absolute case only by tone. Since the tones are not expressed in the normalized spelling, we have not attempted to separate these two cases from the Absolute one.

2. Personal pronoun 1st p.sg., Absolute case ('me, to me').

3. Past (Perfective) 3rd p.sg.masc.

4. Demonstrative pronoun of the far deixis ('that').

5. Nomen actionis.

6. Past (Perfective) 2nd p.sg.

7. Nomen actoris.

8. Passive M-stirps *(-m-)* Non-Past (Imperfective) 2nd p.sg.

9. Gerund in *-naan* which expresses an action preceding the main one.

10. Imperative 2nd p.sg.

11. Instrumental case (in (4) has the meaning of a Directive case).

12. Subordinative conjunction of a wide meaning range ('that', 'as' etc.).

13. Subjunctive (Dolgopolsky's Cohortative) 3rd p.sg. masc.

14. Non-Past (Imperfective) 1st p.pl.

15. *-koo* pronominal possessive suffix 1st p.sg. ('my, mine').

16. *-oota* nominal plural morph.

17. Converb 3rd p.sg. fem.; formed from the Perfective by lengthening the final vowel; used to express coordination or subordination.

18. Imperfective (Present) 3rd p.sg.fem.

19. *-ičč-* Common Cushitic singulative morph, in Oromo used for definite nouns.

20. Personal pronoun 3rd p.sg.masc., Thematic case.

21. Past (Perfective) 1st p.pl.

22. *-ti* uninflected copula used after a possessive pronoun (otherwise *-ḍa*, cf. (8)).

23. Personal pronoun 3rd p.sg.masc., Absolute case.
24. Personal pronoun 1st p.sg., Thematic case.
25. Negation in the Non-Past is expressed by a combination of the negative morph.(*hin-*, *in-*, *im-* depending on position) with the Subjunctive; here the verb is in the 1st p.sg.
26. Demonstrative pronoun of the near deixis ('this').
27. -*ḍa* uninflected copula.
28. Reciprocal preverb ('each other').
29. Subjunctive 3rd p.pl.
30. *tur-* one of the auxiliary verbs used for building compound verb forms. Here the combination of the Non-Past of the main verb with the Past of the auxiliary *tur-* yields a Durative Past.
31. Relative ('which', 'that') derived from the demonstrative pronoun; as can be seen from (1), (6), (7), it alternates with the 3rd p. personal and demonstrative pronouns.
32. Negation in the Past and in subordinate clauses is expressed by the confix *(h)in-...-ne*.
33. On negation in the Non-Past see n. 25.
34. Past (Perfective) 2nd p.sg.; lengthening of the final vowel is due to the interrogative intonation.
35. Locative case.
36. A combination of the Infinitive with the Past (Perfective) of the auxiliary *tur-* yields a Habitual Past.
37. -*s* coordinative conjunction ('and'); Thematic case.
38. The Non-Past (Present) indicator *hin-* is used when the verb has no explicit direct object; it differs only accentologically from the negative morph.
39. -*kee* pronominal possessive suffix, 2nd p.sg., -*tii* Possessive case marker, -*f* Dative case marker.
40. Noun in postpositional function ('between').
41. Non-Past (Imperfective) 3rd p.sg.masc.

Sidamo

(M.Moreno. *Manuale di sidamo*. Roma 1940, p. 156—159)
Commentary·by T.Vetoshkina

Baššo mĭtt-e¹ nugûs-i¹ ar-ê-si² ba'-ičč-i³ mitt-ó⁴ bêt-o ill-ino⁵. Hakk-o⁴ bêt-o⁴ tamãr-e-tti⁶ minn-i-ra⁷ 'ê-s-ino⁸. Bêt-u⁹ tamãr-a-nni¹⁰ am-ã-si² re'-ítu¹¹. Ann-i-si² wol-e¹² ar-é¹² âḍ-i⁵. Búdden-o⁴ âm-a¹² han-é bêt-o⁴ gib-bâno¹³. Ši-tâ-ssi-ra¹⁴ yi-té¹⁵ tag-ičč-ó¹⁶ it-annô-hu¹⁷ gîdd-o⁴ wôr-tu¹¹. Hâkk-o⁴ bêt-i-ra⁷ mĭtt-o⁴ farâss-i¹ no⁵. Tamãr-é-tti minn-î¹⁸ da'-e-wôte¹⁹ bêt-o⁴ "it-tôti"²⁰ yî-no-si²¹ farâšš-i¹ "it-itto-rô²² rak-ké²³ re'-âtto"²⁴. Búdden-o am-â-si "it-i"²⁵ yi-tu-si¹¹ "hûd-e¹² ši-tino-hé-nna"²⁶. "Duw-ômo²⁷ di²⁸ it-êmo"²⁹ yi-no⁵.

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Translation:
Once one king of (lit.: in) his-wife one son begot.
This son into-school (lit.: pupils'-house-to) (he) made-
enter. The-son while-was-learning his-mother died. His-
father another wife took. The-stepmother (lit.:
bread mother) this son hated. Thinking tokill-him
(lit.: kills-him-for speaking) (she) put poison into
what-he-ate. This son had a horse (lit.: this son-for
one horse was). From-the-school when-he-came, to-the-son
"don't-eat" said the-horse, "if-you-eat, at-once (lit.:
hastening) you-die". His-stepmother "eat" told-him "hun-
ger because-will-kill-you". "I-am-satiated, I shall not
eat" he-said.
Notes:
1. Thematic case masculine (< *ergative).
2. -si — pronominal suffix 3rd p.sg.masc., Possessive
with nouns, Accusative-Dative with verbal forms ("him").
Cf. yì-no-si, yì-tu-si
3. Locative postposition < noun ba'- "place" + Singula-
tive suffix -ičč-. Thematic case masc.
4. Absolute case masc.
5. Highland East Cushitic « New» Perfective of uncer-
tain origin, 3rd p.sg.masc.
6. Absolute case fem.pl.
7. Directive case -ra compounded with the Thematic
case -i.
8. Causative Š-stirps (-s-), « New» Perfective 3rd p.
sg.masc.
9. Attributive (Genitive) case in -u used for the lo-
gical subject.
10. Dumessive (3rd p.sg.masc.) — a subordinate verbal
form denoting an action simultaneous with the action
denoted by the main predicate; formed from the Common
Cushitic suffixal Imperfective + suffix -nni.
11. « New» Perfective 3rd p.sg.fem. = 21.
12. Absolute case fem.
13. Highland East Cushitic « New » Imperfective, 3rd
p.sg.fem. (gibbǎno < gibtǎno).
14. Finalis (3rd p.sg.fem.) — a subordinate verbal
form denoting the goal of the main action; formed from
the common Cushitic suffixal Imperfective + suffix -ra
(originally case suffix or postposition); -ssi — "him".
15. Common Cushitic suffixal Perfective (3rd p.sg.
fem.), used as a subordinate predicate in a coordinated
sentence before the main predicate.
16. Absolute case masc.: -ičč- — Common Cushitic Sin-
gulative suffix.
17. Relative (3rd p.sg.masc.) — a verbal form denoting
the attributive clause which refers to the subject or
object of the main predicate; formed from the « New»
Imperfective by suffixation of the relative marker -hu
"which".
18. Thematic case in an Ablative sense.

19. Temporalis (3rd p.sg.masc.) – a verbal form denoting an action preceding the main action in time; formed from the Common Cushitic suffixal Perfective by suffixation of the denominal postposition *wôte* "time".
20. Prohibitive 2nd p.sg. (suffix *-tôti*).
21. deleted (= 11).
22. Conditional 2nd p.sg.masc. – a verbal form denoting real protasis; formed from the «New» Perfective by suffixation of *-rô*.
23. Common Cushitic suffixal Perfective 2nd p.sg. *(rakké < rakté)*; preserved in subordinate clauses through introduction of the «New» Perfective.
24. «New» Imperfective 2nd p.sg.
25. Imperative 2nd p.sg.
26. Temporalis-Causalis (3rd p.sg.fem.) – a verbal form denoting time or cause of the main action; formed from the «New» Perfective by suffixation of postposition *-nna* 'when, because'; *-hé-* a pronominal 2nd p.sg. Accusative-Dative suffix.
27. «New» Perfective 1st p.sg.
28. Negation particle.
29. «New» Imperfective 1st p.sg.

Bilin

(1. L.Reinisch. *Die Bilin-Sprache in Nordost Afrika.* Wien 1882.
2. *Gospel of Mark in the Bilin or Bogos language.* Vienna 1882.)
Commentary by T.Vetoshkina

(1) *Guä'rāb-id[1] 'anbät-o[2] 'kʷārā[3] läb-'rā-ṣīk[4] guäd-īxʷ[5].*
(2) *Kelāl[6] Täsa-Girgīṣ-r-əxʷ[7] warḳ-ī-xʷ-ṣi[9] 'arär-əxʷ[5].*
(3) *A''ī-t[8] ad-o[2] 'nī[9] 'dān[6] Ar'a'dom-sī[10] käḍ'd-äxʷ[11] a'x-o[2] u'w-əxʷ-əlū[12].*
(4) *Yi-t[13] 'kū-to[14] 'int-irəxʷ-mā?[15]*
(5) *Sīm[16] 'gāb-a-t[17] 'wās-ra-sä'nā[18] gu'ru-sī[10] gāŋ-'s-ī-lä[19].*
(6) *Gʷä'däntā[3] fi'ra-t[8] 'arär-än[20] 'arär-äg-än[21] ar'-igī[22] 'fäd-äkʷ[23].*
(7) *Wu'rad 'nāḳ-nəxʷu-ni-l'kā?[24]*
(8) *ə'xʷīnā[6] wās-'rä-rī[25] 'kir-tī[26].*
(9) *žax-ag-'nā[27] 'xāḳʷa-l[28] läbd-i'rəxu-nā[29] = 'xāḳʷā[6] žax-ag-'nā-xʷ-əl[27+28] läbd-i'rəxu-nā[29].*
(10) *Nin Ayhud-ər[16] nuguz gən[30]*
(11) *I'nā[31] 'kaw[16] 'gāb-a-s[32] was-äg-dä'nä-xər[33] ax-dini-na'dī[34] täržäm-äxʷ-lkʷəm[35] giru'wa-s[10] nāḳ-s-irī-lkʷəm[36].*
Translation:
(1) Having begun in the morning, he ploughed until the sun set (lit.: morning-for having-begun sun set-until he-ploughed).
(2) He got a silver brooch from Tasa-Girgis (lit.: brooch Tasa-Girgis-of-he silver-of-he-Acc. he-got).

(3) Having taken a girl, he gave (her) to his brother Aradom, he being the elder (lit.: girl-Acc. having-taken his brother Aradom-Acc. elder-was-which-he having-been he-gave-him).

(4) Have you come to kill me? (lit.: me-Acc. to-kill-thou came-thou-whether).

(5) After you hear the king's speech, send a messenger to me (lit.: king's speech-Acc. you-hear-after messenger-Acc. let-go-me).

(6) A peasant sows not knowing whether he will get the harvest or not. (lit.: peasant-Nom. fruit-Acc. if-he-gets if-he-does-not-get not-knowing he-sows).

(7) Why did they give (it) to you?

(8) The woman of whom you heard is dead.

(9) You have led us to water which we do not drink.

(10) This is Judea's king.

(11) Since you do not understand the language of this country, I shall provide you with an interpreter (lit.: this land's speech-Acc. you-which-do-not-hear you-are-because, which-translate-to-you man-Acc. I-shall-let-give-to-you).

Notes:

1. Dativus absolutus masc.

2. Secutive (3rd p.sg.m.) — a subordinate verb form which denotes an action preceding or simultaneous with the main action.

3. Absolute case (= Nominative), zero inflection.

4. Limitative (3rd p.sg.m.) — a subordinate verb form which denotes the action expressing the limit of the main action; formed by suffixation of the postposition *sīk* "until".

5. Perfective 3rd p.sg.m.; *ī* — a thematic vowel.

6. Status constructus = Absolute case.

7. Full Genitive (= qualifier), which carries the gender-cum-number markers of the head noun (= qualified). Unlike the short Genitive, it is in postposition to the head noun. The case marker (here the Accusative) is added to the last component of the NP.

8. Accusative case fem.

9. Possessive pronoun 3rd p.sg.m. ('his').

10. Accusative case masc.

11. Relative (here Past Relative 3rd p.sg.m.) — a verb form denoting the attributive clause which refers to the subject or object of the main predicate.

12. Perfective 3rd p.sg.m., -*lū* 3rd p.sg.m. pronominal object marker.

13. Accusative case of the 1st p.sg. personal pronoun *yi-* (bound form).

14. Finalis (2nd p.sg.) — a subordinate verb form denoting an action which is the goal/aim of the main action.

15. Perfective 2nd p.sg.; $-m\bar{a}$ — a general question marker.

16. Short Genitive, (m. $-\emptyset$, f. $-\underline{r}$) see also n. 7.

17. Accusative case (fem.) of the nomen actionis $'g\bar{a}ba$.

18. Postessive (2nd p.sg.) — a subordinate verb form denoting an action closely preceding the main action; formed by suffixing the postposition $s\ddot{a}'na$ 'when'.

19. Causative Š-stirps (-s-) Imperative 2nd p.sg.; $-l\ddot{a}$ — 1st p.sg. pronominal object marker ('me').

20. Conditional (3rd p.sg.m.) — a subordinate verb form denoting an action (= protasis) which conditions the main action.

21. Negative form of the Conditional 3rd p.sg.m.

22. Abessive (3rd p.sg.m.) — a subordinate verb form denoting the absence of an action accompanying the main one (cf. in French $sans$ + Infinitive).

23. Imperfective 3rd p.sg.m.

24. Perfective 3rd p.pl.; $-ni$ — a pronominal question marker; $-l'k\bar{a}$ — 2nd p.sg. pronominal object marker ('thee').

25. Object Relative Past (= Perfective) 2nd p.sg.; $-r\bar{\imath}$ marks the 3rd p.sg. fem. of the head noun.

26. Perfective 3rd p.sg.fem.

27. Negative form of the Object Relative Non-Past (= Imperfective); the short Relative (see the first sentence), unlike the full one (see the second sentence) (a) is in preposition to the head noun, and (b) does not take on the gender-cum-number markers of the head noun; $-x^{w}$ marks the 3rd p.sg.m. of the head noun (the same marker as in the Genitive).

28. $-l$ marks the Allative case.

29. Perfective 2nd p.sg.; $-n\bar{a}$ — 1st p.pl. pronominal object marker.

30. Uninflected copula.

31. Demonstrative pronoun of the near deixis ('this').

32. Accusative case (masc.) of the nomen actionis $'g\bar{a}ba$, cf. n. 17/'.

33. Negative form of the Subject Relative Non-Past (= Imperfective) 2nd p.pl.

34. Causal (2nd p.pl.) — a subordinate verb form denoting an action which causes the main action; expressed by the postposition $na'd\bar{\imath}$ "because".

35. Subject Relative Non-Past (= Imperfective) 3rd p.sg.m.; $-lk^{w}\partial m$ 2nd p.pl. pronominal object marker.

36. Causative Š-stirps Futurum 1st p.sg.

(4) *O m o t i c*

No samples

(5) *E g y p t i a n*

Old Egyptian

(*Urkunden des ägyptischen Altertums*. I, Berlin, pp. 100–101).
Commentary by Yu.Ya.Perepelkin and I.M.Diakonoff

st w(y) m zꜣb, (i)r(y) Nḫn, rdy w(y) ḥm.f m smr wꜥt(y), (i)m(y)-rꜣ ḫnt(yw)-š pr-ꜥꜣ; ns.n(.y) 4 (i)m(yw)-rꜣ ḫnt(yw)-š pr-ꜥꜣ, wnw im; ir.k(wy) r ḥst ḥm.f m in-t stp-zꜣ, m ir-t wꜣt n(y)-swt, m irt ꜥḥꜥw; ir.k(wy) my ḳd r ḥst w(y) ḥm.f ḥr.s r (i)ḫ-t nb... n ikr(.y), n wꜥb(.y) ḫr ib n(y) ḥm.f... ink ir(y) m zš wꜥ.k(wy) ḥnꜥ zꜣb, (i)r(y) Nḫn wꜣ.

T r a n s l a t i o n :
Now, (when) I (was) judge, keeper of Hieraconpolis,
his majesty set me up as (his) only friend, the chief
of the *ḫntyw-š* (a social category) of the palace; I sup-
planted four chiefs of the *ḫntyw-š* of the palace who were
there; I did according to what his majesty praised in
preparing the guard, in preparing the way of the king,
in preparing the resting-place; I did so that his majesty
praised me for it exceedingly... because I was skilled,
because I was pleasant for the heart of his majesty...
I (was it who) made (things) into writing, being alone
with the judge, the only keeper of Hieraconpolis.
N o t e s :
(Brackets denote parts of words not expressed in wri-
ting).
st 'now'.
wy Dependent Personal pronoun, 1st p.Sg. (depending
on *st*).
m 'in'.
m zꜣb in (the quality of) judge; cf. *m smr* in (the
quality of) friend.
rdy 'to give', here 'to set up', verbal form *sḏm.f*,
which we have conventionally called "Imperfective" (not
to confuse with the "Habitative" form of *sḏm.f*), here
expressing the Past tense; 3rd p.Sg. masculine.
ḥm.f 'his majesty'.
wꜥty 'only', Adjective with relative suffix *-y*.
pr-ꜥꜣ lit. 'great (ꜥꜣ) house *(pr)*'.
ns.n.y 'to supplant', verbal form *sḏm.n.f* which we have
conventionally called "Perfective"; 1st p.Sg.
wnw one of the participles (Pl.) of the verb 'to be'.
im 'there'.

ir.kwy Qualitative-Stative, 1st p.Sg. 'I did, I made';
r 'to'.

ḥsy to praise; the form *ḥst* is in the first case a passive participle, in the second — a relative finite form.

ir-t making, Infinitive of *iry* (feminine).

ny-swt 'king', construed as a phrase governed by the nota genetivi.

w't way (feminine).

'ḥ'w verbal noun from *'ḥ'* 'to stand, to stop'.

my ḳd lit. 'as (the) image', i.e., 'in a way that'.

ḥr 'on'; *ḥr.s* same with the suffixed possessive pronoun of the 3rd p.f.Sg. (here 'it').

iḫ-t 'thing' (feminine).

nb 'every' (not in concord with the noun). The phrase *r iḫt nb* means 'exceedingly'.

n 'for', here introduces a subordinate clause (in the sense of 'because').

ikr.y, w'b.y verbal form *sḏm.f*, 1st p.Sg.; cf. Sem. *y/iqr* 'to be rare, dear'.

n(y) nota genitivi.

ink Personal Independent pronoun (emphatic), 1st p.Sg.

iry Participle of the verb 'to do, to make'.

w'.kwy Qualitative-Stative, 1st p.Sg. 'to be alone'.

w' one.

(6) *Chadic*

Hausa

(G.Mischlich. *Über Sitten und Gebräuche in Hausa*. In: "Mitteilungen des Seminars für Orientalische Sprachen d. Friedrich-Wilhelm Universität", X, III. Abt., 1907, p. 155; cf. M.A.Smirnova. *Yazyk Khausa* Moscow 1960, p. 69.)

Asalin hausawa an če, waḍansu mutane ne, wa da kane; su ka zo daga kasal larabawa da matan su biu. Su ka zamna wani žeži kusa da kasal Barno, sunansa Gabi, su ka yi bukoki, su na halbin namun žeži, don su ma-halba ne, har matar kanen nan ta haifi ya...

Translation:
The origin of the Hausans, they say, (was that there) were certain men, an elder and a younger brother; they came from the land of the Arabs with their two wives. They settled in a certain deserted place near to the land of Barno, called Gabi, they built huts, (and) they were hunting game, because they were hunters, until the wife of this younger brother bore a daughter...

Notes:
asali n.subst. 'origin'; *-n* nota genitivi.

hausawa n.subst.Pl. (Sg. *bahauše*) 'Hausans'.

an impersonal pronoun

če v. 'to tell'.

waḍansu pron.Pl. (Sg. *wani*) 'certain'.

mutane n.subst.Pl. (Sg. *mutum*) 'men'.

ne copula.

wa n.subst. 'elder brother'.

da (1) conjunction 'and'; (2) preposition 'with'.

kane n.subst. 'younger brother'; -*n* nota genitivi (used also with an adjectival attribute).

zo v. 'to come' (cf. *za* to go, to walk); *su ka zo* 'they came', Past tense 3rd p.m.Pl.

daga preposition 'from'.

kasa, kasa n.subst. land; -*l* nota genitivi.

larabawa n.subst.Pl. (Sg. *balarabe*) Arabs (< Arab. *al-'arab*).

mata n.subst.Pl. (Sg. *mače*) 'women'; -*n* nota genitivi; *mata* also Sg. 'wife', nota genitivi -*r*.

su possessive pronoun of the 3rd p.m.Pl.

biu 'two'.

zamna v. 'to settle'. Cf. *zo*.

wani see *waḍansu*.

žeži n.subst. 'deserted place'.

kusa da prepositional phrase 'near to'.

suna v.subst. 'name'; -*n* nota genitivi + *sa* possessive pronoun of the 3rd p.m.Sg.

yi v. 'to make', Cf. *zo*.

buka, Pl. *bukoki* n.subst. 'hut'.

halbi 'hunt'; *su na halbi* 3rd p.m.Pl. Imperfective; the form *halbi* being a (verbal) noun, it is construed as such with the object in the Genitive, governed by the nota genitivi -*n*.

nama n.subst. 'meat'; with nota genitivi *namu-n; namun žeži* idiom 'game', lit. 'meat of the deserted place'.

don preposition; here 'because'.

su pron. 'they'.

ma-halb-a n.subst. Pl. (Sg. *ma-halbi*) 'hunters'.

har 'until'.

nan demonstrative pronoun.

haifi v. 'to bear (a child)'; *ta(-n) haifi* 3rd p.f.Sg. Perfective.

ya n.subst. 'daughter'.

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ABBREVIATIONS

AAL   — Afroasiatic Linguistics, Malibu.
AM   — Africana Marburgensia, Marburg.
AO   — Archiv orientální, Krakow.
BSOAS   — Bulletin of the Shool of Oriental and African Studies,
          University of London, London.
GLECS   — Groupe linguistique des études chamito-sémitiques, Paris.
JNES   — Journal of Near Eastern Studies, Chicago.
JSS   — Journal of Semitic Studies, Manchester.
JWAL   — Journal of West African Languages.
LRDIV   — Lingvisticheskaya rekonstruktsiya i drevneyshaya istoriya
          Vostoka (Linguistic reconstruction and prehistory of the
          East). M., 1984.
PPPIK   — Pismennyye pamyatniki i pronlemy istorii kultury narodov
          Vostoka (Written monuments and problems of cultural history
          of peoples of the East). GNS — Godichnaya nauchnaya sessiya
          LO IV AN SSSR (Annual scholars' session of the Leningrad
          section of the Institute of Oriental Studies, USSR Academy
          of Sciences). M.
VDI   — Vestnik drevney istorii (Herald of Ancient History). M.
SISAYa — v. Bibliography.